

Ellendale

Of the Forest The 2004 Greater Ellendale Comprehensive Plan



*A Town of the Forest,
A Bridge Between Two Bays*

Prepared for:

THE TOWN OF ELLENDALE TOWN COUNCIL
ELLENDALE, SUSSEX COUNTY, DELAWARE

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December 7, 2004

ELLENDALE OF THE FOREST

A Jewel Within A Jewel



Ellendale is a small jewel within Delaware, which Thomas Jefferson described as “a jewel among the States”. It has the “inherent value” which the Milford poet John Lofland wrote of when he said that “Delaware is like a diamond, diminutive, but having within it inherent value”. Within its unique natural and historic Sussex County setting, Ellendale is a Town of the Forest and a Bridge Between Two Bays,

Ellendale is a green and rural gateway community at a major highway crossing. Located in the Ellendale and Redden Forests, the Town is centered on a historic railroad junction and village. It is also a land bridge that lies across the Peninsular Divide that both divides and connects the Nanticoke River and Chesapeake Bay and Delaware Bay Estuary Watersheds. The Greater Ellendale Community includes vital community institutions and places within the Town and along Old State Road, at New Hope and New Market and along surrounding country roads. It encompasses countryside of great beauty and heritage, including the state forests, the famous Ellendale Swamp and Sussex County farmlands.

Ellendale is now experiencing more change than before, including a new Sussex County Sanitary Sewer District, surrounding population growth, increasing highway traffic on US 113 and DE Route 16, and positive new interest in development, conservation, preservation and revitalization. The 2004 Greater Ellendale Comprehensive Plan seeks to preserve the best of Ellendale as a country town and to address its past, present and future as a small jewel of Delaware.

THE 2004 GREATER ELLENDALE COMPREHENSIVE PLAN

‘The True Tradition of Good Old Ellendale’

By: Willard S. Dickerson

**“I was bred, born and raised near a Sussex Village
Known for its lumber and productive village;
It’s quaint country town of very little fame
And folks often wonder how it ever got its name.
A road was opened up from Greenwood to the shore
Then a Mister Josh Ellegood built himself a store
At the junction of the road and Lenape Trace;
Settlers called crossroads “Ellegood’s Place”.**

**They surveyed for a railroad from Dover on down.
Mr. Thomas William Dale was the chief engineer
And he brought his daughter Ellen who grew very dear
To the population of the town, Both Women and male;
They named it in honor of the darling daughter Dale.
A depot was erected, the Ties and rails were laid
Through the tiny town on a long, level grade.**

**The people trekked from parts of Sussex County
To make a modest fortune on the timbered bounty
From Nanticoke Swamp, and the land where stood
The Delaware pine, the oak, the elm and hickory wood.
The stumps were pulled, the new ground was cleared,
From thence and there the fertile farms appeared.
They built themselves a church with zeal and loving care
For preaching on Sunday and Wednesday evening prayer.**

**They worshipped in their church for fifty-five years
‘Till it was burned to the ground midst anguish and fears
A larger church was then erected and opened up in May
And that symbol of Salvation is standing there today.
I received my education in the brown shingled school
When the teachers were tough and as stubborn as a mule.
So, that’s the hallowed country town from whence I hail
And that’s the true tradition of good old Ellendale.”**

THE 2004 GREATER ELLENDALE COMPREHENSIVE PLAN

OUR COMMUNITY

‘And Such a Pleasant Place It Is To Us, We Do Declare’

By 3rd Grade Pupils at Ellendale Colored School when Miss Goode was teacher

“Ellendale’s in Sussex
In lower Delaware
And such a pleasant place it is
To us, we do declare.

Houses all are painted
Its main street’s broad and clean
And everywhere are flowers gay
That makes a pretty scene.

Shade trees, tall, are standing
Long lanes and garden spots
As well as on the lawns so green,
And on some vacant lots.

Stores are small, but showy
With mixed wares that are sold,
And churches, two, hold services,
For people young and old.

Schools are training children
The colored and the white
And both the schools are given care
By folks who know what’s right.

Three busy garages
Are running every day.
And one sawmill turns trees to boards
That, piled up high, long lay.

Small and large shell buttons,
So useful on our clothes,
Are turned out in a factory
That runs e’en when it snows.

Iron things are mended,
And boards made smooth and
straight,
In Ingram’s shop that does them well
While persons chat and wait.
Shoes that need half-soling,

As good as new can be
A cobbler neatly does the work,
Who once lived o’er the sea.

Mail goes to a building,
Quite small and painted white,
That’s opened when the day is young
And closed up before night.

People without autos
Can find a way to go;
For trains run South and trains run
North
On time, though they are slow.

Ellendale’s a swamp, too,
That’s known both far and near
For nature there is at her best
Each season of the year.

Fires have damaged trees there,
But fireman, quick and brave,
Have run to put those fires out,
The other trees to save.

Ellendale has firemen,
Who’re always on the spot
To keep our homes from burning
down
And we thank them a lot.

Ellendale’s our home place,
And we will sing her praise;
For she is good enough for us,
And will be all our days.”

THE 2004 GREATER ELLENDALE COMPREHENSIVE PLAN



TOWN OF ELLENDALE, SUSSEX COUNTY, DELAWARE
ORDINANCE NO. _____
BY THE TOWN COUNCIL OF THE TOWN OF ELLENDALE
ADOPTING THE 2004 GREATER ELLENDALE COMPREHENSIVE PLAN

WHEREAS, Title 22, Section 702 of the Delaware Code, the Livable Delaware Program of the Governor of the State of Delaware and House Bill 255 amending Title 9, Title 22 and Title 29 of the Delaware Code authorize Delaware municipalities to carefully prepare and adopt Comprehensive Development Plans to guide and regulate future growth and development, and

WHEREAS, Delaware's Office of State Planning Coordination provides guidance to local governments in order to effectuate the goal of having well-drawn and executed Comprehensive Plans for all counties and municipalities in Delaware. This includes the provision that Comprehensive Plans be approved and certified by the Governor of Delaware upon their completion. It further requires that certified Comprehensive Plans be revised on a five-year cycle and that Zoning Revisions needed to implement the Plan be adopted within 18 months of the adoption of the Plan, and,

WHEREAS, the Town of Ellendale has not previously had a Comprehensive Plan and needs one for the purpose of planning for future historic preservation, community revitalization, economic development, land conservation, new development, potential growth and services;

WHEREAS, the Town of Ellendale Town Council has prepared and approved, in consultation with the public, interested parties, and government agencies, The 2004 Greater Ellendale Comprehensive Plan, including both the Town of Ellendale and adjacent community areas. The Plan articulates an overall vision for the community's future and includes an inventory of existing conditions, goals, policies and recommended action projects for implementing the Plan and has conducted a duly advertised public hearing on September 21, 2004; and desires to adopt the Plan as a guide for future development.

WHEREAS, The 2004 Greater Ellendale Comprehensive Plan will be the foundation for the creation of a Town of Ellendale Zoning Ordinance, Subdivision Regulations, the adoption of housing and maintenance codes, a Capital Improvement Program, future grant and loan program applications, public-private partnerships, working relationships with county, state and federal agencies and other implementation tools;

WHEREAS, the Comprehensive Plan is needed in furtherance of the public health, safety, and welfare of the Ellendale community and will substantially advance legitimate municipal, community, county, state and national interests; and

WHEREAS, the Town Council of Ellendale held a duly advertised public hearing on the Plan on September 21, 2004, at which time The 2004 Greater Ellendale Comprehensive Plan was reviewed with the public and public comments were received and considered, and

WHEREAS, the Town Council of Ellendale conducted a duly advertised Special Meeting with the Delaware Office of State Planning Coordination and other state agencies, representatives of Sussex County and interested citizens on December 6, 2004 in order to reach consensus on the Plan's treatment of the area

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west of US 113 as a Special Study Area, said consensus having successfully been reached and added to the Comprehensive Plan as an Addendum,

NOW THEREFORE, BE IT ORDAINED by the Town Council of the Town of Ellendale that The 2004 Greater Ellendale Comprehensive Plan is hereby adopted on this 7th day of December 2004.

Attest:

Ellendale Town Council

Merriell Mitchell, Mayor

Donald L. Webb, Vice President

Kimberly D. Hughes, Treasurer

James Abbott, Tax Collector

Robert Dale Annis, Secretary

THE GREENBELT OF ELLENDALE



The Ellendale Swamp

The natural Greenbelt of Ellendale is focused on the great Ellendale Swamp, the Ellendale and Redden State Forests and the farms and lands that surround the Town. The surviving tracks and right-of-way of the 19th Century Queen Anne's Railway run from the Swamp to Milton. The Nature Conservancy, The Conservation Fund, the Delaware Department of Agriculture's Forest Service, The Delaware Agricultural Lands Preservation Foundation, The Delaware Department of Natural Resources and Environmental Control and others are actively working for conservation in the Ellendale area. Through partnerships with these agencies, the Town and Community of Ellendale can make itself one of Delaware's leading places for hunting, ecotourism, enjoyment of nature, hiking, biking, nature tours and conservation. The Comprehensive Plan foresees the day when a new Queen Anne's Railway Greenway Trail will be created, connecting with a Railroad Square trailhead in the heart of the village, with the Ellendale Swamp, and with historic Milton as a bright new link in the Atlantic-to-Pacific American Discovery Trail.

ELLENDALE'S RAILROAD SQUARE

The Heart of A Railroad Village



Looking North -The Train Station is on the Left

Collection of Fire Chief Rowland Moore

Ellendale's Railroad Square was a major rail junction and a beehive of economic activity in Sussex County. The first section of the Junction and Breakwater Railroad from Harrington to Milford was completed in 1859. In March 1860, the Company's Survey Team, consisting of T.F. Tilghman as chief engineer, 1 surveyor, 1 rodman, 2 chainmen and 4 axemen, worked south through forest and farmland from Milford to Georgetown. This portion of the tracks would parallel the Federalist-era "Old State Road" to the west. Construction of the railroad south of Milford was delayed by the Civil War and did not begin until 1867. By 1869 the line was completed through Ellendale and Georgetown to Lewes. It was extended from there to Rehoboth in 1878. There were 14 stations and regular passenger, mail, and freight service on the 44-mile line from Harrington to Rehoboth. Through its junctions, the J. & B. was a part of the first rail network to serve all three Delmarva states – Delaware, Maryland and Virginia. In the 1890s the Queen Anne's Railroad was built from Love Point and Queenstown on Chesapeake Bay through Ellendale to Milton and Lewes on Delaware Bay. Connections were made with steamboats crossing the Chesapeake to Baltimore and the Delaware to Cape May. Around this square and the rail siding to the north were a watch box, pump house, water tower, 2 stations, stores, a Cannery, the Ellendale Excelsior Company and the R. J. Clendaniel Sawmill. The Town of Ellendale was incorporated in 1905. In 1916 the DuPont Boulevard, now US 113, was built a mile to the west.

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Preparation of The 2004 Greater Ellendale Comprehensive Plan

The 2004 Greater Ellendale Comprehensive Plan has been prepared by the Ellendale Town Council and the Citizenry of the Town and surrounding community. The Town and community worked closely with David G. Nutter, AICP, of Nutter Associates, Community Planners, of Salisbury, Maryland. The preparation of the Plan was funded in part by grants from the Delaware Office of State Planning Coordination, the Delaware Department of Natural Resources, Recreation and Environmental Control (DNREC), the Delaware Division of Public Health Office of Drinking Water and Community Development Block Grant funds administered by the Delaware State Housing Authority, the United States Department of Housing and Urban Development and the Sussex County Division of Community Development. The Plan presents a strategy, vision, goals and objectives, policies and recommended action projects for the Town of Ellendale and the surrounding Greater Ellendale Area.

The Plan addresses a twenty-year time period and a five-year implementation period. It will be updated every five years. It has studied an area approximately 1.5 miles in radius around the Town. It has been prepared in accordance with the Governor's Livable Delaware program and the laws of Delaware.

Geographic Information Systems (GIS) mapping for the Comprehensive Plan has been prepared by DNREC and The Salisbury University Regional GIS Cooperative. Nutter Associates worked closely with the Town and with George, Miles & Buhr, Architects and Engineers, on a feasibility analysis for a public water system for the Greater Ellendale Area.

THE 2004 GREATER ELLENDALE COMPREHENSIVE PLAN



Priorities of The 2004 Greater Ellendale Comprehensive Plan

- 1. “Ellendale Should Look Like Ellendale” - Preserve Ellendale’s Character As A Small Southern Delaware Town While Planning For Good Growth And Municipal Development,**
- 2. Implement A Public Water System Which Seeks An Affordable, Fair, Controlled And Regulated Water Supply,**
- 3. Develop a Municipal Zoning Ordinance, Subdivision Regulations and a Planning and Zoning Commission,**
- 4. Attract New Public & Private Investment For Community Revitalization,**
- 5. Provide Affordable New Home Ownership and Rental Housing Opportunities,**
- 6. Create a Queen Anne’s Railway Greenway Trail, as a “Trail with Rail” Project, along the Milton Industrial Track between Ellendale and Milton, Connecting the Greenway Trail to the new Atlantic-to-Pacific “American Discovery Trail”**
- 7. Create & Sustain Excellent Community Institutions, Programs & Facilities for both the Town and Surrounding Area,**
- 8. Enhance Ellendale’s Natural Relationships With The Ellendale Swamp, The Ellendale and Redden State Forests, the Nanticoke River and Broadkill Greenways, and the Nanticoke River and Delaware Bay Estuary Watersheds,**
- 9. Preserve Farmland, Conserve the Ellendale Swamp and Expand the Ellendale and Redden State Forests Through Use of Conservation Planning and Districting and the Purchase or Transfer of Development Rights,**
- 10. Connect the Town and “Railroad Square”, Ellendale’s Historic Town Center, with Delaware Route 16 and US 113 Improvements and Development,**
- 11. Achieve Measured Economic Growth for Ellendale as Part Of The Growth of Delmarva, Delaware and Sussex County,**
- 12. Form a Potential Growth and Annexation Area for Possible New Municipal Expansion,**
- 13. Revitalize And Preserve Ellendale’s Historic Sites and Buildings,**
- 14. Seek Innovative Livable Delaware Design Solutions For Streetscape, Residential, Mixed-Use And Commercial Developments,**
- 15. Build Ellendale’s Tax Base to Provide Improved Municipal Services,**
- 16. Cooperate With County, State and Conservation Organizations To Create a Greenbelt of Farm and Natural Resource Lands Around and Within Ellendale,**
- 17. Plan for Mixed-Use Development Along Portions of US 113 and DE Route 16 Where Consistent With The Character of Ellendale.**

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ACKNOWLEDGEMENTS

TOWN OF ELLENDALE TOWN COUNCIL

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Donald L. Webb, Vice President/Police Commissioner
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THE 2004 GREATER ELLENDALE COMPREHENSIVE PLAN

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I. Introduction & Executive Summary

The purpose of **The 2004 Greater Ellendale Comprehensive Plan** is to guide future planning, revitalization, historic preservation, community development and conservation in the Greater Ellendale Area. The Plan expresses a vision for the future of the Town of Ellendale and its surrounding community places and countryside. It contains a vision, goals and objectives, policies and programs and recommended action projects to implement the vision.

Ellendale of the Forest

Ellendale is a Town of the Forest and a Bridge between two Bays. It is a unique Gateway connecting Town, Forest, Farmlands, the Nanticoke River and Delaware Bay Watersheds and the Beaches of Delaware. Our vision of Ellendale is that it is a small town with unique people and character. It has a special history as a Railroad Village in the forests and farmlands of Sussex County and Southern Delaware. In the future, Ellendale will continue to look and feel like it has in the past, while benefiting from the best qualities of healthy growth. The Ellendale and Redden State Forests will be protected and expanded. The Ellendale Swamp will be conserved for future generations. A new Greenway Trail will be developed along the Queen Anne's Railway Line between Ellendale's Railroad Square and Milton's Cannery Village, becoming part of The American Discovery Trail. Community institutions and housing resources will be nurtured. Ellendale will develop municipal services to safeguard the quality of the municipality for its citizens, neighbors, businesses and visitors. Its history and its diversity will be honored. Its citizens will take pride in the way it maintains its legacy while building for a good future.

As the map entitled **A Framework for Future Land Use** illustrates, the Plan sees Greater Ellendale as a Regional Gateway in a network of forests, farmlands and community places focused on a historic Town Center. It is adjacent to the major north-south regional transportation arteries of US 113, Old State Road and the Norfolk Southern Railroad and to the east-west DE Route 16, "Beach Highway". Ellendale is a beautiful Town in a beautiful and varied setting. It has a strong relationship with the area around it, stretching toward Greenwood, Milford, Milton and Georgetown. Within this Gateway lie a series of important Community Places, including Railroad Square in the historic Town Center, a potential Historic District within the central part of the Town, waterways, potential hiking trails, a transit route, housing areas, Old State Road and a growing commercial hub at US Route 113 and DE Route 16.

The Plan has been developed in keeping with the recently adopted **2003 Sussex County Comprehensive Plan Update**, with the **Governor's Livable Delaware Program** and with Delaware's Planning Laws.

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Since the passage of **House Bill 255** by the Delaware Legislature in 2001, Delaware has required that lands to be annexed in future years must have been evaluated in the certified Comprehensive Plan of the municipality. The Comprehensive Plan addresses a twenty-year time frame. Some elements would occur within 10 years and others within a longer 20-year period. The focus of the Plan is on physical development and community design, while considering socio-economic, civic, cooperative, competitive and cultural factors in the life of Ellendale. It addresses healthy population growth, jobs and economic development, environmental protection, historic preservation and land conservation in the Greater Ellendale Area. The **Greater Ellendale Area** is the area included within an approximately 1.5-mile radius around the crossing of Main Street and East and West Railroad Avenues.

The plan endeavors to respect and protect the natural environment of the **Greenway** that stretches between the Delaware Bay Estuary and the Nanticoke River and Chesapeake Bay. This broad natural Greenway corridor links waterways, parks, forests, wildlife refuges, wetlands, towns and historic sites. It reaches the Delaware Bay Estuary to the east via Cedar Creek, which joins the Mispillion River at Mispillion Light, and the Broadkill River. The Nanticoke Greenway to the west reaches the Chesapeake Bay via the Gravelly Branch and Nanticoke River. The Plan also endeavors to see the role of Ellendale in the conservation and expansion of the Ellendale Swamp, the Ellendale and Redden State Forests and surrounding farmlands. These irreplaceable natural and farm environments and their connections to the historic Town at their center will be protected through land use planning, town and county zoning and land conservation programs. In this manner, development will be encouraged at existing centers, rural and farmland areas will be protected and prime natural resources will be conserved.

There are significant concentrations of low and moderate income housing in the Ellendale Area, including a significant amount of this housing in older deteriorated homes and trailers. The Plan further endeavors to include policies and action projects that can lead to the provision of decent housing and an improved quality of life in these areas.

The Comprehensive Plan identifies the following priority actions:

- ❑ Complete connections to the new Sussex County **Ellendale and New Market Sewer System** and work with Sussex County and DelDOT to complete related hook-ups, Street Resurfacings, Sidewalk Installation and Housing Rehabilitation. Consider a future expansion of the district.
- ❑ Use The 2004 Greater Ellendale Comprehensive Plan as an **active Guide for Planning, Zoning and Related Code Enforcement, Preservation, Conservation, Rehabilitation and Development** within the Town and, through working with Sussex County and the State of Delaware, or through annexations, within community places in adjacent areas. Develop active community and agency participation in planning for the Town and Community.

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- ❑ Based on the recommendations of the Plan, develop a new **Town of Ellendale Municipal Zoning Ordinance, Subdivision Regulations and Related Codes**. Work cooperatively with Sussex County and the State of Delaware on issues affecting cooperative land use planning in the surrounding area.
- ❑ Implement the new **Town of Ellendale and Greater Ellendale Water System Feasibility Analysis**, including the study of alternatives and consideration of affordability and voluntary versus mandatory connection policies. Consider both public and private alternatives but make sure the Town has substantial control over the system so that future development may be regulated.
- ❑ Enhance the **Railroad Square** area at the Norfolk and Southern Railroad crossing of DE Route 16 and West and East Railroad Avenues as a revitalized Town Center and Greenway Trail Trailhead in the center of Ellendale. The Plan envisions very small convenience retail, tourist and exhibit uses in the Railroad Square area.
- ❑ Consider relationships between **Costs of Municipal Services And Revenues From Different Types Of Development** as well as **Adequate Public Facilities**.
- ❑ Develop **New Residential Areas** with good planning and design on a variety of sites, some near the Town Center and some in outlying neighborhoods. New **Infill Housing**, compatible in design, density and price ranges with adjacent neighborhoods, will be developed. The predominant housing type should be detached single-family houses for home ownership. Good quality rental housing should be supported. A diversity of housing and neighborhood styles are envisioned within the framework of Ellendale's small-town tradition of architectural scale.
- ❑ Work closely with DelDOT and Sussex County in planning for DelDOT's **Corridor Capacity Preservation Program and the US 113 North/South Limited Access Highway Study**. Pursue quality, safe transportation improvements for the intersection of US Route 113 and DE Route 16, DE Route 16 and DE Route 213 and DE Route 16 and East and West Railroad Avenues. These should include Welcome Gateway features at 113 and 16, protection of the Beach Highway neighborhood from adverse impacts, provision for a Wildlife Crossing parallel to Route 16, planning for traffic calming along Beach Highway and Main Street, improved intersection designs at 113/16, 16/213 and 16/Railroad Avenue, new channelization, possible conversion of existing lanes into frontage roads, placement of crossover and access ways, cross-easements and service roads for well-planned economic development, public transit stops, bicycle, hiking, pedestrian, streetscape, landscaping and related improvements at appropriate points along Routes 113, 213 and 16. Provide limited access for local economic development.
- ❑ Work with The Nature Conservancy, Sussex County and the State of Delaware to implement **Land Conservation Programs** in the Greater Ellendale Area in coordination with Delaware's Green Infrastructure and Greenways and Agricultural Land Preservation Programs. Goals include maximum farmland preservation, retention of a viable Greenbelt and active use of the Agricultural Lands Preservation Program, expansion of the Ellendale and Redden State Forests,

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conservation of the Ellendale Swamp and creation of a Queen Anne's Railway Greenway Trail.

- ❑ Implement new **Community Facility And Service Improvements** for the community, including Town Hall improvements and improved Town Park facilities, an expanded New Hope Recreation and Development Center and other facilities.
- ❑ Form a partnership with the state and county to pursue a small community **Economic Development Program** that can stimulate business growth and attraction for sites on Route 16 and US 113 as well as for revitalizing the Town Center/Railroad Square area. Work to become part of Sussex County's new Economic Incentives Program and the cluster-based economic development strategy being developed by DeDO.
- ❑ Implement measures for an **Ellendale Community Design** approach to ensure that "**Ellendale will look like Ellendale**" in the future and that honors Ellendale's traditional scale, styles and architecture. It would include new streetscape projects, creation of a dedicated and well-maintained Greenway Trail, a small-scale mixed-use town center and a Main Street/Beach Highway revitalization project as well as neo-traditional neighborhood-oriented design.

Action Projects include:

- ❑ The Town of Ellendale should create a **Municipal Zoning Ordinance and Subdivision Regulations** and establish a **Planning and Zoning Commission**.
- ❑ The Town and Community should forge **Partnerships With Public, Private And Non-Profit Organizations** in the areas of Land Conservation, Historic Preservation, Community Development and Transportation to carry out the projects identified in the Plan. As a small community, Ellendale will be dependent on such partnerships with the County, State and Non-profit organizations.
- ❑ Work with DNREC to create a "**Rail with Trail**" **Greenway Trail along the Queen Anne's Railway Line between Railroad Square and Cannery Village in Milton**. This would connect the natural resource areas of the Town and the Greater Ellendale Area with those of the surrounding Region. It would include the Forests, Swamp, McCabe Preserve and Ponder Tract, help guarantee a natural wildlife corridor and activate the Broadkill and Nanticoke Greenway concepts. Make the Trail a permanent link in the **American Discovery Trail** that reaches from the Atlantic to the Pacific and passes through the Redden State Forest.
- ❑ Develop new landscaping and historical signage within **Railroad Square** and along Main Street. Consider incentives to encourage small-scale business uses.
- ❑ Identify potentials for small **Commercial and Services Development Projects** on suitable sites easily accessible to the Town Center, Routes 16, 213 and 113.
- ❑ Work with DelDOT to implement an **Ellendale Gateways** program that employs welcome signage, streetscape design and development coordination to establish

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strong relationships between the Town Center, Ellendale's neighborhoods and anticipated future development along Delaware Route 16 and US Route 113.

The Comprehensive Plan will guide future planning and zoning decisions including land use and transportation changes, utility extensions, zoning, annexations, site selection for new facilities, State investments, capital improvement programming and public improvements. Among the most important elements of the Comprehensive Plan are the **Framework for Future Land Use** and **Future Land Use Plans for the Town and Greater Ellendale Area**.

Other elements of the Plan include:

- ❑ Delineation of a **Potential Growth and Annexation Area** along the periphery of the Town in accordance with the requirements of Delaware's House Bill 255 and the Livable Delaware Program. This is an area within which the Town may consider future voluntary annexation requests by property owners or groups of owners. It recognizes that annexation is a voluntary process. Annexations must be contiguous with current Town boundaries. Potential Annexation within the first ten-year period will be focused on the area between US 113 and Route 213 in the west portions of the Study Area. Annexation must be closely coordinated with the Sussex County Ellendale and New Market Sewer District, the recommended development of a Public Water System for Ellendale and further development of Town services and revenues. Potential Annexation is shown in two ten-year phases.
- ❑ A **Population Growth and Land Absorption Projection For The Year 2025**, based on demographic, infrastructure and services analysis. Population within a one-mile radius of the Town is estimated to grow by 750 persons, or approximately 300 dwelling units, by 2025. Within the larger area, population is projected to grow by twice as much. How much of the estimated larger population will be within the Town depends on numerous factors, including the success of annexation policy. At an anticipated residential density of 4 units per acre, the 300 units would require 75 acres of land.
- ❑ A **Greater Ellendale Area Geographic Information System** of computerized natural resource and land use mapping and related property data, one that can be adapted and expanded for future services in years to come.

The Comprehensive Plan has been prepared with active community participation and with Sussex County and State of Delaware cooperation. Once final citizen, state and county comments have been received and responded to, **The 2004 Greater Ellendale Comprehensive Plan** will be adopted by ordinance by the Town of Ellendale Town Council. The Plan will then be submitted to the State of Delaware for certification by the Governor. It will then be Ellendale's guide for planning, zoning and development. Delaware's Planning Laws require that Comprehensive Plans be reviewed and updated every five years. State law also requires that zoning actions necessary to implement the

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Plan, such as the creation of a Municipal Zoning Ordinance for the Town of Ellendale, should be completed within 18 months after adoption of the Plan.

The **Implementation Section** of the Plan identifies important actions to begin the implementation of the Comprehensive Plan. These include partnerships for conservation, creation of a Water Supply System and creation of a **Town of Ellendale Zoning Ordinance**.

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II. Ellendale's Location and Regional Framework

As the map entitled Ellendale's Regional Framework illustrates, Ellendale's location at the crossing of US Route 113, the DuPont Boulevard, and Delaware Route 16, Beach Highway and Main Street, is regionally strategic in several ways:

Ellendale is an important part of a Land Bridge between the Nanticoke River/Chesapeake Bay and the Delaware Bay Estuary Watersheds. As part of the ecology of the eastern edge of the Nanticoke River Watershed, Ellendale is a Chesapeake Bay community. As part of the western perimeter of the Delaware Bay Estuary, it is a Delaware Bay community. It served as part of the habitat and hunting territories of both the Nanticoke and the Lenni Lenape (Delaware) Indians in the 17th and 18th centuries and for many hundreds of years before. Europeans came into the area during the late 17th century. The symbolic place of Ellendale's origin, and an important natural place in its natural environment, is "Railroad Square" just north of the Ellendale Swamp. The Plan recommends that new attention be paid to rediscovering the educational and community value and eco- and heritage visitor potential of this phenomenon. This should take the form of defining and interpreting a Broadkill, Cedar Creek and Nanticoke River Greenway. It should focus on a Greenway Trail along the old Queen Anne's Railway connecting Cannery Village in Milton with Railroad Square in Ellendale. It will include developing Railroad Square as a trailhead on Route 16 in the center of the village. It should also mean stream restoration projects for the watershed tributaries that rise in the center of Ellendale, and their possible recreational use for canoeing and kayaking adventures that cross between the Bays.

Ellendale is a Town of the Forest. Founded as a highway and railroad clearing in the forest for the shipment of forest products, and centered naturally on the magnificent Ellendale Swamp and Delaware's largest protected State Forests, Ellendale and Redden, Ellendale is a unique ecological center. This means new potentials for investment in research, education and conservation activities.

Ellendale is Part of a Cultural Path Between Two Bays. Culturally, Ellendale and is part of a path between the Chesapeake and Delaware Bays. When settlement occurred, families followed this pathway. It led originally from Jamestown and from Northampton County on Virginia's Eastern Shore through Old Somerset and Dorchester Counties in Maryland into Sussex County, where the Nanticoke rises in streams in an arc from Melson in Wicomico County, Maryland to Harrington in Kent County, Delaware. This is a cultural entity that has potential for cooperative ventures, festivals and special events as well as exhibits and the founding of new museums.

Ellendale is Within the Biologically Diverse Broadkill and Nanticoke Greenway Corridor. Because of its preserved forests and farmlands, Ellendale is at the center of a bio-diverse region of cypress swamps and white cedar stands of forest. The Greenway is rich in its diversity of species and the importance of its habitats and wetlands. It is filled

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with opportunities for the enjoyment of nature, hiking, kayaking, hunting and bird watching.

Ellendale Has High Transportation Accessibility for both Beach and East Coast Regional Traffic. Ellendale was founded as a transportation center on Old State Road and the Junction and Breakwater Railroad. US Route 113 is the Main Street of central Delaware. It is now the focus of a major DelDOT/Sussex County project to transform it into a Limited Access Highway. Along 113, Ellendale is equidistant between Milford and Georgetown and centrally located between the Wilmington/Philadelphia area and Norfolk. By virtue of its position on Delaware Route 16 between the Chesapeake Bay Bridge and Maryland Route 404 and Delaware's beach communities of Lewes and Rehoboth Beach, it is also very strategically located from the perspective of Delmarva travel, trade and tourism.

Fifteen Million People Live Within A 150-Mile Radius of Ellendale. This is a two and one-half hour driving radius, and includes the Wilmington, Philadelphia, Baltimore, Washington DC and Norfolk metropolitan areas. An estimated 30% of this population consists of members of the Baby Boom Generation born between 1946-64. The leading edge of this population is now approaching retirement age and has shown a preference for small-town living. It can be expected that Ellendale will attract households from this demographic group over the 20-year time period of the Comprehensive Plan. It can be expected that they will bring heightened interest in heritage and eco-tourism as well as new business skills. As part of a national trend, it is also expected, and is now being experienced, that increasing numbers of immigrants from other countries will select Ellendale as a place to live and do business.

Ellendale Is Experiencing Demand For New Development. Ellendale is located in the path of development pressures moving from Wilmington, Philadelphia and the New York/New Jersey Region in the north and from Lewes, Rehoboth Beach and Milton to the east. This demand for new development is now moving west from the Delaware coast into central Sussex County. These forces can be expected to begin reaching Ellendale in the early years of the planning period. They include commercial forces along the main arteries as well as residential forces. They can be either good or bad forces, depending on how they are planned for.

By virtue of its location, heritage and aspirations, Ellendale will attract new interest in conservation and ecology, heritage and preservation and new growth and development during the coming decades.

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III. Ellendale's Planning Process

The 2004 Greater Ellendale Comprehensive Plan project is a new undertaking for Ellendale. The Town has not previously had a comprehensive plan. In 1905, the Town was developed around the Ellendale rail junction in accordance with the "Map of the town of Ellendale, Del. Survey of AD 1905". Since the passage of Sussex County's first Zoning Ordinance, zoning within the Town has been the responsibility of the county.

Clear signs of change and growth prompted the desire to prepare a Comprehensive Plan. During the Fall of 2002, the Delaware Office of State Planning Coordination contacted the Town about the desirability of having a Comprehensive Plan in accordance with the Livable Delaware program. The Town had attempted to complete a major annexation of land in its northwest corner in the Year 2000, but the voters outside the Town limits did not approve the proposed annexation.

Delaware's adoption of House Bill 255 in 2001 requires that land proposed for annexation be included in the Town's locally approved and state-certified Comprehensive Plan. The Governor's Livable Delaware program also now offers incentives for communities to prepare Plans.

Since 2000, Sussex County has planned, designed, funded and constructed a new \$11 million Ellendale and New Market Sewer System, including parallel funding for street repaving, sewer connections and home rehabilitation. Both Town leaders and community leaders in the larger Greater Ellendale advocated the new Sewer System.

Town discussions took place and it was decided to seek professional assistance in preparing the Plan. Discussions were held with qualified planning consultants. After deliberation by the Town Council, Nutter Associates, Community Planners, of Salisbury, Maryland was selected to assist the Town with the Comprehensive Plan project in November 2002. The Town then applied for and received a small grant to defray part of the cost of the Plan from the Livable Delaware Planning Grant administered by the Governor's Cabinet Committee on State Planning Issues.

Since Ellendale operates under Sussex County zoning and does not have a Planning and Zoning Commission, it was agreed that the Town Council would serve as the public body to supervise the preparation of the Plan. Nutter Associates then made a reconnaissance tour of the Town and Study Area with representatives of the Town Council, Police Department and Fire Department.

Given the major importance of considering the natural resource areas around the Town in the Comprehensive Plan, the Town submitted a grant application to DNREC for a Coastal Resources and Natural Habitat Planning Grant in December that was approved in January.

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Working with Nutter Associates, the Town Council began an analysis of community issues. A photographic reconnaissance was made of Ellendale and its environs. Walking and driving tours were made. Demographic, population and land use data was assembled and evaluated. Design and architecture were considered. Nutter Associates held an initial meeting with Sussex County to gain greater understanding of the new Sewer System.

A major community-wide public meeting was held at the Ellendale Fire Hall on December 16, 2003. The meeting was advertised in the Milford Challenge. Flyers identifying issues to be addressed by the Plan were delivered to every household within the one-mile radius study area. Well over one hundred citizens, said to be a record attendance for any Town meeting within recent history, attended the Community Meeting.

David Nutter of Nutter Associates presented color slides and maps of the Study Area as well as a list of ideas for the Plan and facilitated an open discussion in which citizen comments and ideas were recorded. It was clear that the citizens of Ellendale wished to preserve the character and scale of the community and to preserve its natural areas while allowing for moderate future growth and improvements.

The Town Council also discussed the need to analyze and make decisions on future improvements to the Town's utility services. The Ellendale Working Group, a consortium of public agencies and community leaders, wrote to the Council to request that steps be taken to investigate the desirability of a municipal water system which would serve basically the same service area served by the Sussex County Sewer System.

It was agreed that the Town would seek funding from state and federal sources to undertake a Greater Ellendale Water System Feasibility Analysis as an integral part of the Comprehensive Plan. Funding applications were prepared and submitted to the Delaware Division of Public Health's Office of Drinking Water and, via the Sussex County Division of Community Development and the Delaware State Housing Authority, to the U.S. Department of Housing and Urban Development. The engineering firm of George, Miles and Buhr was commissioned to provide engineering expertise.

Bruce Wright of the First State Community Action Agency, acting as Chair of the Ellendale Working Group, attended the April meeting of the Town Council to discuss objectives for the Water System Analysis. He explained that the Working Group, in coordination with DNREC and the Office of Drinking Water, would be conducting testing at approximately 40 well sites during the last week in April.

An initial meeting between the Town Council and David Carter and Susan Love of DNREC occurred on February 3, 2004. At that time there was discussion of the natural resource components of the Plan and DNREC's role in inventorying and mapping these elements.

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At the same Town Council meeting, representatives of the DelDOT/Sussex County US 113 North/South Study were introduced in order to introduce the Council to their study. The US 113 North/South Study is a major transportation planning and highway engineering project being undertaken by the State and County to transform US 113, to the fullest extent possible, into a Limited Access Highway. Mr. Ed Thomas of Kramer and Associates will serve as liaison with the Town for the project. On September 13, 2004 DelDOT introduced a Preliminary Alternative for the Ellendale Area.

The project representatives stated their desire to work closely with the Ellendale community at each stage of their process. It was agreed that the US 113 and Comprehensive Plan projects should be closely coordinated. DelDOT subsequently provided a copy of the February 2004 US 113 North/South Study Environmental Inventory for the Ellendale Area to the Comprehensive Plan Team.

Subsequent to the meeting, Nutter Associates prepared a sketch of land use, design, transportation and environmental factors that are relevant to future improvements to the US 113/DE Route 16 and DE Route 16/DE Route 213 intersections. The sketch was submitted to the DelDOT US 113 Planning Team for its consideration.

Since the Town has not had a previous comprehensive plan, there was the need for extensive discussion and data collection during this period. During this period, Nutter Associates interviewed Town citizens, County officials, State agency representatives, area real estate professionals, and representatives of The Nature Conservancy. An application was prepared and submitted to Delaware House of Representatives Members Carey and Ewing for a Delaware Historical Marker to be designed and installed in Railroad Square to commemorate the founding of Ellendale.

Ann Marie Townshend, Sussex County Circuit Rider of the Delaware Office of State Planning Coordination, attended the March meeting of the Town Council. She facilitated a discussion of the Livable Delaware program and applicable state laws pertaining to comprehensive planning, annexation and municipal zoning.

A draft Vision and Goals Statement was then prepared for the Comprehensive Plan, reflecting the ideas of the Community Meeting. After approval of the Draft by the Town Council, it was widely circulated to interested citizens and County, State and Private parties to solicit their ideas for the Plan.

A meeting was held with Ellendale representatives and DNREC staff assigned to the project on February 24, 2004 in Dover. DNREC proceeded to prepare a series of Natural Resource GIS computerized maps for the Comprehensive Plan. These were presented to the Town Council by DNREC on April 6, 2004. Discussions were held with key personnel in DNREC, the Delaware Department of Agriculture and The Nature Conservancy on conservation initiatives and agricultural preservation.

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Nutter Associates and George, Miles and Buhr began the Greater Ellendale Area Water System Feasibility Analysis during the last week in April 2004, with a scheduled completion date of August 2004. Interviews were conducted with the Ellendale Town Council, the Ellendale Volunteer Fire Company, the State of Delaware Office of Drinking Water, the Ellendale Working Group, the Sussex County Engineering Department, the Delaware Geological Survey and engineering representatives of the Towns of Milton, Georgetown, Milford and Greenwood.

During May and June of 2004 Nutter Associates, working with the Town Council, drafted Existing Land Use, Framework for Future Land Use, Future Land Use and Potential Growth and Annexation Area Plan Maps. Nutter Associates then arranged with Salisbury University's Regional GIS Cooperative to prepare GIS maps covering Existing Land Use, a Framework for Future Land Use, Future Land Use and Potential Growth and Annexation. Data was provided by Sussex County to assist in this component of the computer mapping.

Also developed during this period was a larger area concept for a Greenway Trail between Railroad Square in Ellendale and Cannery Village in Milton, including consideration of the relationship between this proposed "Rails with Trails" Transportation Enhancement Project and the American Discovery Trail which connects Cape Henlopen State Park with the Pacific Ocean.

The Draft 2004 Greater Ellendale Comprehensive Plan was submitted to the Delaware Office of State Planning Coordination for comments on August 3, 2004.

Following review of the Plan by the State PLUS Committee on August 25, 2004, consideration of comments and further development of the Plan, the Town and Planning Team conducted a Public Hearing on the draft Plan on September 21, 2004 at the Ellendale Fire Hall. On September 22, 2004, a meeting was held in Dover between Town, County and State officials to review the capacity and future expansion of the Ellendale Sanitary Sewer System. On September 23, 2004, Governor Ruth Ann Minner signed Executive Order 59 formally adopting the 2004 State Strategies for Policies and Spending.

The 2004 Greater Ellendale Comprehensive Plan was then completed in accordance with all requirements and adopted by Ordinance at the regularly scheduled Town Council meeting on October 5, 2004.

The Legal Basis of the Comprehensive Plan

In Delaware, Title 22, Chapter 7, Section 702, of the Delaware Code identifies the requirements for the Comprehensive Plan:

§ 702. Comprehensive development plan.

(a) A planning commission established by any incorporated municipality under this chapter shall prepare a comprehensive plan for the city or town or portions thereof as the commission deems appropriate. It is the purpose of this section to encourage the most appropriate uses of the physical and fiscal resources of the municipality and the coordination of municipal growth, development and infrastructure investment actions with those of other municipalities, counties and the State through a process of municipal comprehensive planning.

(b) Comprehensive plan means a document in text and maps, containing at a minimum, a **municipal development strategy setting forth the jurisdiction's position on population and housing growth within the jurisdiction, expansion of its boundaries, development of adjacent areas, redevelopment potential, community character, and the general uses of land within the community, and critical community development and infrastructure issues.** The comprehensive planning process shall demonstrate coordination with other municipalities, the county and the State during plan preparation. The comprehensive plan for municipalities of greater than 2,000 population shall also contain, as appropriate to the size and character of the jurisdiction, a description of the physical, demographic and economic conditions of the jurisdiction; as well as policies, statements, goals and planning components for public and private uses of land, transportation, economic development, affordable housing, community facilities, open spaces and recreation, protection of sensitive areas, community design, adequate water and wastewater systems, protection of historic and cultural resources, annexation and such other elements which in accordance with present and future needs, in the judgment of the municipality, best promotes the health, safety, prosperity and general public welfare of the jurisdiction's residents.

(c) The comprehensive plan shall be the basis for the development of zoning regulations as permitted pursuant to Chapter 3 of this title. Should a jurisdiction exercise its authority to establish municipal zoning regulations pursuant to Chapter 3 of this title, it shall, within 18 months of the adoption of a comprehensive development plan or revision thereof, amend its official zoning map to rezone all lands within the municipality in accordance with the uses of land provided for in the comprehensive development plan.

(d) After a comprehensive plan or portion thereof has been adopted by the municipality in accordance to this chapter, the comprehensive plan shall have the force of law and no development shall be permitted except as consistent with the plan.

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(e) At least every 5 years a municipality shall review its adopted comprehensive plan to determine if its provisions are still relevant given changing conditions in the municipality or in the surrounding areas. The adopted comprehensive plan shall be revised, updated and amended as necessary, and re-adopted at least every 10 years.

(f) The comprehensive plan or amendments or revisions thereto shall be submitted to the Governor or designee at such time as the plan is made available for public review. The municipality shall provide sufficient copies for review by the Governor's Advisory Council on Planning Coordination. The Advisory Council, within 30 days of plan submission, shall conduct a public meeting, at which time the municipality shall make a presentation of the plan and its underlying goals and development policies, except when the Advisory Council determines that the comprehensive plan, amendments or revisions are fully consistent with statewide land development goals, policies and criteria as adopted by the Governor or Cabinet Committee on State Planning Issues. Following the public meeting the plan shall be subject to the state review and certification process set forth in § 9103 of Title 29. If the Advisory Council determines that a public meeting is not required as provided above, the plan shall be submitted directly to the Governor or his or her designee for certification provided in § 9103 of Title 29.

Delaware requires that local Comprehensive Plans be certified by the Governor after review by state agencies. Also, as a result of Delaware's passage of House Bill 255 in 2001, the Comprehensive Plan will play a significant role in decisions pertaining to town growth and annexation. House Bill 255 requires that in order to be eligible for future annexation, a property must be identified as such in a municipality's adopted, and state-certified, Comprehensive Plan.

Priorities of the Plan are to help strengthen Ellendale's neighborhoods and community institutions, its physical environment and economic development in the form of attractive, planned new commercial and business development.

The process of developing the Plan begins with interviewing community leaders and public agencies, researching community history, reviewing Supporting Plans and studies, developing an inventory of existing conditions, preparing descriptions of existing and currently proposed development projects, gathering community input, developing a vision and goals, drafting policy statements in each topical area of the plan and preparing an implantation plan.

IV. The History and Character of Ellendale

“**ELLENDALE** (245 pop.), a village notable for its wide streets, is still a primary lumber and timber center of Delaware, though greatly crippled industrially by the decreasing supply of marketable pine and oak trees. There is much young pine timber in the nearby swamp and elsewhere, but the practice is to cut the trees long before they reach the size of the trees that used to furnish the planks and wide boards for which the region was famous. Many of the residents raise chickens or drive truckloads of produce to northern markets.

The village was laid out in 1867 by Dr. John S. Prettyman, who sought to start a community at the railheads of a branch of the railroad, which had reached this point; he named it Ellendale after Ellen, his wife. Most of the residents of Federalsburg (formerly Fleatown), one mile north, moved to the new town rising by the side of the steel rails.

The Model-T still functions around here. Sometimes the motors have outworn the bodies and become “saw-rigs” for cutting up firewood.

At 9.9 *m*(iles) is the junction with US 113 (see Tour 2).”

- ❑ A glimpse of Ellendale in 1938, from **Delaware – A Guide to the First State**, American Guide Series, The Viking Press, 1938

“**Ellendale** was founded in the early 1800s and incorporated in 1905. The town was first settled by a few families near Morris Tavern Crossroads at the intersection of U.S. 113 and Del. 16. It was named after the daughter of Alfred Short, a Whig Republican elected to the state legislature in 1852. The town’s current site was established in 1866 when the group migrated east to settle around the Junction & Breakwater Railroad depot.”

- ❑ **Sussex County Profile 2003**, Independent Newspapers and Chamber of Commerce.

Ellendale is a product of its Swamp and Forests. Everything that it now is traces to these natural treasures.

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This historical sketch prepared for The 2004 Greater Ellendale Comprehensive Plan explores the following themes in Ellendale's history.

It owes a great deal to the fine local history entitled Ellendale – “Reminiscing The Past”, prepared by the Ellendale Ruritan Club under the leadership of W. Martin Atkins in 1985. Copies can be purchased at The Ellendale Trading Company on Main Street.

The historical themes are:

A Town of the Forest – Ellendale began a Town when the Junction and Breakwater Railroad penetrated the Ellendale Swamp and Forest in 1868. This began its economy of extracting, processing and shipping forest products to Philadelphia and other market centers by rail. Today, the Town and its adjacent neighborhoods are surrounded by the Redden and Ellendale State Forests, the Ellendale Swamp, various Glatfelter Pulp Wood Company tracts and farmlands. Consequently, Ellendale and its natural environment is one of the great natural and open space treasures of Delaware and Delmarva.

A Bridge Between Two Bays – Ellendale occupies a unique natural landscape. It is a land bridge between two watersheds. At Elevation 53' above sea level it is a small peak between the eastward flowing waters to the Delaware Bay Estuary and the southwesterly flowing waters to the Nanticoke River and Chesapeake Bay. In this it must have served as a strategic “high” route between the Nanticoke and the Delaware in earliest times. The Ellendale, formerly called the Nanticoke, Swamp is a centerpiece in this divide, or “dale”, and has clearly played a major role in the area's history. Here occurs a rising of streams feeding both Bays.

A Place of Important Historical Events – Because of its natural heritage, as well as its central location on Delmarva, many interesting historical events have occurred here.

The Nanticoke and Lenni Lenape Indian Tribes – It is believed that the Lenni Lenape (Delaware) and Nanticoke Indian tribes had a natural boundary between their territories along the Peninsular Divide, as whole watersheds tended to be their territories of habitation, agriculture, hunting and fishing.

In fact Ellendale's history Ellendale – “Reminiscing The Past” recounts an intriguing legend, reported by a Mr. Willard Dickerson, which may be myth or may be fact, but which underscores the idea of the “divide”:

"The 'Nanticoke Swamp' was so named because it was thought that the big ditch running through the swamp and confluencing with Middleford Branch was really the head of the Nanticoke River. It is now called Ellendale Swamp and the natives, including myself, were called 'Swampers.' The swamp was the hunting grounds of the Nanticoke

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Indians until the Lenapes drove them out in a bitter battle for supremacy on the 'Battle Green' near 'Chestnut Ridge.' These traditions and legends were handed down to me by my grandparents almost three quarters of a century ago and they were old people then. Yet, with all of the modernization, ravages of time and disbelief in legends after a few generations, I am still prone to revive them in my memory and believe them in my memory and believe them as being authentically true."

'Chestnut Ridge' appears to have been a place name for a hill near Fleatown (Federalburg), near an old racetrack that was later given the name "Battlegreen Racing Track". Residents with a knack for exploration also report extensive Native American arrowheads at a farm field near Cedar Corners.

The Native American Era

"Between 30,000 and 10,000 B.C. the first Native Americans (the Paleo-Indians) arrived in eastern North America. They came as nomadic hunters in search of food. During the Archaic Period (ending around 8,000 B.C.), these people began traveling shorter distances for food and started to develop more permanent lifestyles. While continuing to gain more control of their food supply during the Woodland Period (8,000 B.C.-17th century), they began to build permanent year round villages. During this same period, the area of Island Field and other sites in Delaware became the eastern terminus for trade routes that extended as far as the Mississippi River region.

A rich diversity of Native American cultures, including the Nanticoke and Lenni Lenape, inhabited Delaware at the time the first Europeans arrived. Those who lived in the southern region were more similar to the Algonkian people of the Chesapeake Bay area while those in the north had closer cultural ties with the Iroquois of New York and Pennsylvania.

The history of Native Americans in Delaware parallels the history of Native Americans throughout the New World. Initial contact with Europeans disrupted their communities. Diseases carried by the Europeans decimated the native population, particularly the very young and the very old. This resulted in the loss of the younger generation needed to carry on the traditions as well as the loss of the elders who were responsible for passing on the collective knowledge of the group."

The Lenape Trace, a regional trail of the Delawares, is said to have passed through the site of Ellendale approximately along the route of the Old State Road. Willard S.

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Dickerson stated in a Milford Chronicle article that the Trace “. . . was the main Indian trail up the Peninsula, having its origin at what is now Pocomoke City, Maryland and traversing the state up to (today’s) Marcus Hook, Pa.”

Settlement from the Nanticoke to the Delaware

A tract of two hundred acres lying west of the present site of Ellendale, and adjoining land of Jonah Webb, was taken up about 1750 by Edward Calloway.

John Webb, in 1747, took up a tract of four hundred acres on the northeast side of the land of Jonah Webb.

Murder in the Swamp

The various depositions relating to the 1759 Willey murder case reveals the role of the Swamp as a place away from the rigors of the law. In this case the issue became legal jurisdiction over the case. The boundaries between the colonies of Maryland and Delaware had been in dispute since the times of the Lords Baltimore and William Penn. The case included numerous statements depicting the area as a No Mans Land throughout the 18th century. Parties of men from both sides would sometimes meet while ranging for wild horses. It was a last refuge for wolves, and later a meeting and hiding place of Tories. Some of the last large tracts were located there.

The Black Camp Resurrection of 1780

The Black Camp Resurrection occurred in 1780 was a final episode in the history of Loyalism in Sussex County during the American Revolution.

Harold Hancock describes the insurrection in his History of Sussex County:

“With the removal of the British from Philadelphia in the spring of 1778, the number of enemy vessels in Delaware Bay decreased, and the activities of Sussex County Tories diminished. Only one other insurrection in Sussex County occurred – the famous Black Camp Rebellion of 1780. The insurrectionists were mainly from Cedar Creek and Slaughter Neck Hundred, and their headquarters were in a swamp about six miles north of Georgetown. Their leaders, Bartholomew Banynum (Banum) and William Dutton, had about 400 men formed in “Associations” or militia companies. An investigator reported the causes as follows:

‘Some of these ignorant people were for opposing all law, others for establishing what they called the King’s Laws – and others for opposing the payment of taxes – but generally seem to have believed that all to the southward of Chesapeake Bay had laid down their arms and submitted to the King’s Laws – and that they should very easy make Sussex county drow the same.’

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Militia from Kent County dispersed the insurrectionists. Some were sent off to serve in the Continental Army, and thirty-seven were indicted for treason in the State Supreme Court. Eight were ordered to be hung ‘by the neck but not till you be dead, for then your bowels must be taken out and burnt before your face, then your head must be severed from your body, and your body divided into four Quarters, and these must be at the disposal of the Supreme Authority in the State. Fortunately this sentence which was customary for treason was not carried out, and all the participants were pardoned by the General Assembly on November 4, 1780.”

Transportation and Land Use in the late 18th Century: Small Hamlets Scattered in an Agricultural Terrain

By the 1790’s, there were two small villages in the Ellendale area. To the north was Federalsburg, more commonly known as “Fleatown”, apparently because of the qualities of the Fleatown Inn. To the east was, and is, the village of New Market. They were connected by a branch of the old King’s Highway that connected Milford to Milton. Agriculture was now established throughout the area and the villages served as small distribution centers and commercial points on the old King’s Highway system.

The Founding of Georgetown as the new Sussex County Seat

With the laying down of the Mason-Dixon Line in 1767, the long-disputed boundary between Maryland and Delaware, and between the original holdings of Lord Baltimore and William Penn, was settled. What had been the eastern sections of Maryland’s Dorchester and Old Somerset Counties now became Western Sussex County.

The former Marylanders now found that the original Sussex County seat at Lewes was too far for them to comfortably travel back and forth in a single day. They successfully petitioned for a new Sussex County Seat at Georgetown. The General Assembly appointed a special committee of House of Representative and Senate members to oversee the design and construction of the Georgetown Circle and the new planned regional highways leading into it.

The Building of Old State Road

The road leading into the Georgetown Circle from the north became today’s Old State Road.

The history of the planning, design, construction and subsequent development of Old State Road (DE Route 213) is important for an understanding of the two communities of Ellendale and Lincoln today, and of land use and economic development in the area traversed from Milford to Georgetown.

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The WPA-era classic Delaware - A Guide To the First State, American Writers Project, 1938, contains the following interesting passage in its chapter on "Transportation":

". . . after 1791, when Georgetown became the county-seat of Sussex County, a road followed from Milford to Georgetown and south into Maryland. Today the DuPont Boulevard runs through the state in the same general direction, but often cutting across the curves of the old road."

And also:

"It was 1796 before the King's roads, with some of their windings eliminated became the continuous State Road from Wilmington into Maryland, with branches to Lewes and Seaford."

In Federalist Delaware, 1775-1815, John A. Munroe says that in the Petitions of January 5, 1795:

"Inhabitants of Sussex requested the Assembly to build new roads to the courthouse at Georgetown, as ' . . . a great means of inducing Jurors, Witnesses and others to attend. . . who now are in danger of life or Limb should Night at any time happen to overtake them'."

By 1824, the Young and Delleker Map of Delaware shows that Old State Road has been completed along its present Georgetown-Milford alignment. The 1836 Edward Stanley/John Randel Map made for the Delaware Railroad shows Old State Road connecting with "Fleatown" (Federalsburg) and showing a distillery near today's intersection of US 113 and DE Route 15.

Fleatown is said to have contained two inns and taverns on the Old state Road stagecoach route, where horses were changed, an old Brick Church and corrals for drovers plying the old highway.

Old State Road had become by mid-century part of a joint economic development corridor with the Junction and Breakwater Railroad. It was an era of stagecoach travel with the coaches stopping at the inns of Fleatown, and then on to Georgetown.

The tract of land which became the Town was originally called "Bennett's Pleasure", obtained in 1740.

The Coming of the Railroad

According to John C. Hayman's book Rails Along The Chesapeake - A History of Railroad on the Delmarva Peninsula 1827-1978, the Survey Party for the Junction & Breakwater Railroad, starting in Milford on March 16, 1860, reached Georgetown on

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March 28, 1860. Construction of the line was then delayed by the Civil War. The railroad was completed by 1869.

Emancipation

Emancipation of Delaware's African Americans remaining in slavery occurred with the passage of the 14th Amendment in 1867. At that time, African American families found homes away from the farms where they had been kept, often joining the large numbers of Free Blacks that by that time were located throughout Delaware.

In 1870, B.E. Jester & Brother erected a steam sawmill at Ellendale. The mill has a capacity of three thousand feet per day. In 1886, a basket factory was added with a capacity of two thousand baskets per day. The two establishments employed twenty-two persons.

Economic Development

In his History of Delaware, Scharf recounts the economic development of the period:

“In 1886 Jester & Reed erected a canning establishment at Ellendale. They can tomatoes principally, and during the season pack three thousand five hundred cases, which are shipped to Philadelphia. While in operation forty hands are employed.

Considerable attention is paid to evaporating peaches in this hundred. When there is a good crop of peaches the evaporators are extensive operators. Among the persons engaged in this business are Mark H. Davis, Joseph M. Davis, Geo. H. Draper, Hammond & Wheelbank, Perryman & Short, Wm. R. Phillips, William Prettyman, Fox & Webb, Frederick Wiswell and E.B. Reed & Co.

Henry D. Macklin began to manufacture bricks at Ellendale in 1872. The yard was open three months per year, and fifty thousand bricks manufactured.

In 1881 Henry Stuart erected a steam saw and gristmill. The grist-mill was operated one year, and the saw-mill three years.”

On July 16, 1873, a tract of land for a church, parsonage and school was made to the Ellendale Methodist Episcopal Church. A school and parsonage costing five hundred dollars were soon erected. The church was commenced in 1882, and dedicated December 31st of the same year. It consisted of a neat frame edifice thirty by forty-four feet, at a cost of twelve hundred dollars.

By 1891, the Town contained two churches, two stores, a school, a post office, a canning establishment, an evaporator, a brickyard, two sawmills and basket factories and one hundred inhabitants.

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In 1898 the Queen Anne's Railroad was constructed from Queenstown on the Chesapeake Bay, through Greenwood and Ellendale to Milton and Lewes on the Delaware Bay side. At Queenstown, the line made steamer connections across the Chesapeake Bay and at Lewes to Cape May City across the Delaware River. This added a second railroad line and station to Ellendale, and created a beehive of daily railroad activity in the heart of the Town.

It is difficult to imagine today that the route from the Maryland line to Delaware Bay included stops at the following stations: Adamsville, Blanchard, Greenwood, Owens, Banning, Deputy, Ellendale, Wolfe, Milton, Whitesboro, Burton, Drawbridge, Lewes and Rehoboth.

In this era, Ellendale had all the accoutrements of railroading in its streets. In the space this Plan calls "Railroad Square", there was a watch box, pump-house, water tower for supplying the engines, two stations within sight, manual crossing arms, and "watch boxes" at each street crossing, including signs to stop oncoming traffic. The stations had ticket agents, who were also telegraph operators, separate men's and women's waiting rooms, pot-bellied stoves, pens for calves to be transferred into rail cars, a hotel across the street with a jitney service to Milton.

The Ellendale Post Office took root on MacCauley Street along with a large second floor room used by the Ioka Tribe No. 35 (men's) and Hiawatha Council No. 6 (women's) groups of the Independent Order of Red Men and by the Junior Order of American Mechanics. Today this building is the Town Hall and Police Station.

Prior to paved streets was " . . . the custom of burning the leaves that fell from the trees that lined the streets. This was a beautiful sight when many people burned their leaves in the evening. And, the aroma of burning leaves was something to remember."

The 1905 Town Plan

Although the Town appears to have been laid out in 1867, upon completion of the railroad, or even 1857, by some accounts, it was not until 1905 that a Town Plan was published. The Town was incorporated some time prior to the federal census taken in 1919, when a population of 250 was reported.

The 1905 Plan for the 128-acre area of the Town of Ellendale was surveyed and divided into 13 streets, 5 alleys, 38 blocks and approximately 500 individual 9,600 square foot lots, each measuring 60 feet by 160 feet. The Town area was centered on the north-south railroad tracks and the east-west Main Street. The 1905 plat shows a highly urban and developed town within the present town limits of Ellendale. If all 500 lots had been developed, assuming the average household size of 6 persons of that time, its total population would have been some 3,000 persons, some ten times larger than its present size.

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The major organizing elements were an east-west, 70-foot wide new Main Street as part of a new east-west route connecting Greenwood with Milton, Old State Road as the western boundary of the Town and the two railroads, the north-south Delaware, Maryland and Virginia Railroad (formerly Junction and Breakwater RR) within the 60-foot wide right-of-way of Railroad Avenue, and the Maryland and Virginia Railroad (formerly Queen Anne's Railway) within its own 60-foot wide right-of-way along what is Donovan Street today.

The east-west streets were named for the trees, Oak, Pine and Willow, that gave the Town its character and its economy, while the north-south streets were named for Town or national leaders. The only exceptions to the rectilinear grid of streets were three shorter diagonal ones: Slaughter Beach Road at the Town's northeast corner, State Street connecting with Old State Road in the southwest corner, and a diagonal right-of-way connecting Railroad Avenue with State Street. The lots on the west side of the D.M.& V.R.R. were reserved for future widening of the rail facility.

Perhaps twenty-five percent of the lots have been developed over time, leaving many undeveloped open spaces within the Town, especially in the northern area originally platted as part of Oak and Pine Streets. In addition, the partial development of Ellendale has left many "paper streets" which were never built.

The area along Main Street between Prettyman and Washington Streets became in effect both the commercial and civic center of the Town. Here were located the Old Stable, the two railroad stations, the Town Hall, Town Park, the Post Office and the shops.

The first Ellendale Methodist Church burned in 1916 and the Public School, which stood beside it, burned in 1926.

Ellendale is said to have been named for a local lady, although there is disagreement about which one. Some say it was John S. Prettyman's wife Ellen. Mr. Prettyman is viewed by many as the man who first laid out the Town in 1867, after completion of the north-south rail line. Others feel that it was named for Ellen the daughter or granddaughter of Alfred Short, a civic spirited surveyor, schoolmaster, storekeeper and postmaster, as well as a Whig Republican who served in the state legislature, who is also credited as the father of Ellendale.

By 1888, a new Ellendale School had been built and was serving an average enrollment of 15. Subjects taught were grammar, history, physiology, hygiene, geography, "mental arithmetic" and "written arithmetic".

In 1907 another of the Town's leading citizens, Joshua A. Ellegood, attended the Jamestown Exposition as a member of the Delaware Commission for the 300th Anniversary of Settlement.

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Industrial and Commercial Areas

Once Ellendale had been laid out as a “railroad village”, almost identical in form to its northern, but unincorporated, neighbor, Lincoln, it developed accordingly. A railroad siding was added through the marked off railroad lots on the west side of the D.M. & V. RR. Line north of Main Street. The siding then provided a location for the Ellendale Excelsior Company and Clendaniel Saw Mill connected with the tracks.

Commercial uses developed at the key intersections of Main Street and Railroad Avenue and Main Street and Old State Road, with a few scattered along Main Street in between. Later, in the “Slaughter Beach” corner of the Town, a gas station was developed, and close by was the Town Dump and, farther out, the Ellendale Town Cemetery.

In 1882, the first Ellendale United Methodist Church was dedicated. The second church was dedicated in 1918 at a new Washington and Main Street site, after the older church had burned. Dr. D. John Krantz of Patterson, New Jersey, “preached both night and morning” at the dedication service. \$15,000.00 was raised. Dr. Krantz closed his services with the statement that “. . . it was the greatest giving of money he ever saw for church purpose from a congregation so small, and he doubted it would be ever equaled in the future”.

The first building of the Mt. Zion A.M.E. Church was built by its congregation in 1906, after several years of worship in the first African American schoolhouse next door. Elizah and Willis Prettyjohn hauled logs for the new church. Pews were purchased for the new building in 1925. The church was enlarged and remodeled extensively in 1952. On September 19, 1970, the present church was dedicated. The 1906-1952 church building was donated to the Mt. Shiloh Church on South Old State Road where it stands today as one of Ellendale’s most historic buildings.

By 1898, Ellendale was described as “An important postal station on the D.M.&V.R.R., in the southern part of Cedar Creek Hundred, eight miles from Georgetown, its county seat, and the same distance from Milford, its banking town. No better section can be found in the State for farmers desiring homes at low prices, as land sells at the low price of from \$10 to \$20 per acre on which grain, fruits and vegetables can be raised in abundance. Its railroad facilities for marketing are the best. Among the industries located here are a steam saw and planing mill and basket factory, and a cannery and fruit evaporator. It has a daily stage line to Milton, six and one-half miles away; fare 50 cents. Telegraph and express offices. Population, 109. Dickinson, Willard S., correspondent.”

The Town was lit by kerosene streetlamps until the 1927, when they were replaced with electric lights by the new Lincoln and Ellendale Electric Company founded by Mr. And Mrs. William S. Houseman. About the new electric company the 1927 Town report says: “It was greatly appreciated and soon almost everyone was enjoying the benefits of having electricity in their homes for lights, refrigerators, washers and many other uses.”

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Beach traffic was beginning in this era, as middle class families from the larger cities began to take regular summer vacations, and as they developed a knack for swimming and sun bathing.

Historic Homes

During the first thirty years of the new Town's existence, numerous Victorian homes were built, primarily along and south of Main Street. These houses constitute an impressive historic resource today.

The DuPont Boulevard

The DuPont Boulevard was built beginning in 1916 as an economic development contribution to the State of Delaware by General T. Coleman DuPont, Pierre S. DuPont and other members of the DuPont family. It is located some 3,500 feet west of Old State Road and parallels the older road and railway line. Workers earned \$1.75 per day. Gradually, not rapidly, a few commercial establishments like the Atlantic Station took up sites on the new concrete-paved highway. It later became US 113. The Diamond State Telephone Company began erecting telephone poles around Town in the same year. There were two doctors in the Town at that time. The stately tree-lined boulevard that passes through the Ellendale Forest is one of the most spectacular design elements in Delaware.

The State Forests

The Redden and Ellendale State Forests were first conceived and laid out in 1930's.

The Twentieth Century

During the period after the Second World War numerous African American families found jobs at industrial establishments in the area and built residences along Old State Road.

Over sixty Ellendale citizens served with honor in World War I, World War II, the Korean War and Viet Nam.

New community facilities were built. The architecturally impressive shingled African American School, Ellendale Colored School 195C, was funded by the DuPont family, designed by B. F. Willis and built between 1922 and 1925. Its site was chosen to be close to Ellendale's historically Black neighborhood and close to the earlier African American one-room school building.

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The beautiful International Style Ellendale School 125 was built in 1920. After Brown verses the Board of Education resulted in school desegregation, the two schools were combined at School 125. In 1988, Mt. Zion A.M.E. organized the purchase of former School 195C from Cornwell Thompson and renamed it the New Hope Recreation Center. The School 125 building was converted into the Kent Sussex Detox Center in 1979.

New Zion A.M.E. Church was built. The Philadelphia Holiness Pentecostal Church began its development along Old State Road.

During the post war period, the railroads began to experience sharp competition by trucking. As was the case in many states, lines on Delmarva were slated to be abandoned. However, politicians from the states of Maryland and Delaware contracted with Conrail to operate these struggling branches as a subsidized “designated operator” with ownership retained by Penn Central. After one year of operation the expense of subsidizing these lines at Conrail’s high cost led the state governments to seek a lower cost short line as a “designated operator”.

In 1960 the Women’s Auxiliary of the Ellendale Volunteer Fire Company, Inc was formed to help raise funds for the Fire Company, which was first organized in 1920. Ellendale’s impressive Fire Hall, the Town’s largest structure, was erected in 1980.

A Spirit of ’76 Bicentennial Town Fair was held in Ellendale to benefit its Boy Scout and Girl Scout troops. It included a parade, game and merchandise booths, souvenir and lunch stands and street dancing by the Fire Hall in the evening. The volunteer fire companies of Ellendale, Milford and Greenwood, along with the Ellendale Ruritan Club, Milford Jaycees, and Fire Company Ladies Auxiliary all took part with the scouts. Showcase motorcycles and antique cars were exhibited.

In August 1977, the Maryland and Delaware Railroad Company (MDDE) was created and, in 1994, took over two lines in the State of Delaware as contract operator. One branch ran between Ellendale and Milton, and a second branch between Georgetown and Lewes. However, in 1999 the MDDE decided not to renew the operating contract and operation of these two lines was returned to the previous operator, the Delaware Coast Line.

The Twenty-First Century

The Twenty-first century has brought the following historical forces to bear on the Ellendale community. Many are those influencing small communities throughout Delmarva and the nation.

Regional and local automobile and truck traffic is growing rapidly on Beach Highway/Main Street and on US Route 113. Partly in response to this, the County and

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State have begun a major US 113 North/South Study designed to make US 113 a Limited Access Highway central Delaware.

Delaware's First State DART Transit service is being developed with additional lines and stops to better serve both east-west and north-south travel demand in Sussex County, including improved connections between the service jobs available in the Beach communities with the greater availability of affordable housing farther west.

Sussex County growing very rapidly in general, experiencing an average annual rate of growth of 3.8% between 1990 and the year 2000.

In 2004 Sussex County completed the construction of the Ellendale-New Market Sewer System. This is a major progressive accomplishment by the County, Town and community.

Nationally, the leading edge of the Baby Boom is now approaching retirement age, giving impetus to new and restored housing initiatives in Sussex County.

Consistent with new feelings toward preserving the environmental and local heritage, there is growing interest in eco- and heritage tourism that is very relevant to Ellendale's future directions.

Educational progress is more readily available to residents than ever before.

Ellendale even appeared on the silver screen at the 2003 Rehoboth Beach Independent Film Festival. The movie was a 2003 film entitled "Evil", a "midnight horror" film said to be cast and set entirely in Ellendale.

It had the following description in the festival catalogue:

"EVIL < WORLD PREMIERE > / A Local horror film? Shot entirely in Ellendale, Delaware utilizing a cast and crew of locals, this is a can't miss for all of you cult horror film fans, as well as those of you who have always wanted to see our beloved region captured on film. / This isn't Hollywood! So get ready to be scared, terrorized and shocked as you are taken into the depths of evil and fear in this ultimate tale of terror! When two friends Dylan and Allen move from the crime of big city Baltimore to a small-town community on the Eastern Shore, it is peace and tranquility they are seeking. Unfortunately for them, the small town they have chosen hold nothing but dread and carnage as one local after another meets a grisly death. Who is the killer? Can the killing be stopped? Dir. Todd Michael Smith, USA, DVD, 84 mins."

Whether or not all of the film was actually shot in Ellendale remains something of a mystery, but there interesting scenes that were shot in the Ellendale Swamp, along Old State Road and at the State Forest Picnic Shelter on the DuPont Boulevard.

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Ellendale's Centennial in 2005

2005 will be the 100th Anniversary of the Town of Ellendale and a time to celebrate its history, recent accomplishments and promising future.

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III. Inventory of Existing Conditions

The Inventory of Existing Conditions provides important data on relevant programs, natural and built environment conditions and socio-demographic factors that provide a basis for the Plan's vision, goals and objectives, proposed action projects and implementation recommendations.

A. Ellendale's Natural Environment

Given Ellendale's setting in the Ellendale Forest and Swamp and its position on the Peninsular Divide between the Two Bays, its relationship to Delaware's natural environment is of extreme importance.

The Ellendale Swamp

The central natural feature of Ellendale is the great Ellendale Swamp. No one could say it better that the Delaware members of the Federal Writers Project, whose 1938 Delaware – A Guide to the First State is a literary classic:

“A PICNIC-GROUND AND CAMP SITE (Left), 10.2 m. from Milford on the DuPont Boulevard (fireplaces for cooking, firewood, covered picnic tables, a pure water supply, and toilet facilities) is on well-drained ground in the ELLENDALE SWAMP. The pleasant, shady site is maintained jointly by the Forestry and Highway Departments.

Though only 40 acres of Ellendale Swamp is State-owned forest, the 400-foot right-of-way includes strips of swamp and woodland cared for by the Forestry Department for the Highway Department. The state-owned strips of forest prevent the erection of any signboards along a 3-mile stretch of wild beauty, an avenue straight as an arrow bordered by pines, cedars, tall hollies, and a lush undergrowth of land and water vegetation. Altogether the Ellendale swamp and forest comprise about 16 square miles, one-fourth cleared or tilled.

Although the swamp contains no big game it is a favorite with naturalists; the plant and animal life that abounds here includes many species of birds and plants native only to the South; among the birds are the prothonotary warbler and yellow-throated warbler, and among the plants are the muscadine grape, the swamp magnolia, and the white cedar. The prickly-pear grows in sunny patches of the dry woodland floor, mistletoe clings to high branches of hardwood trees, and wildflowers include several kinds of orchids.

Like most large fresh-water swamps the Ellendale (38-52 alt.) is on the divide between two drainage areas. Part of the run-off eventually finds its way into the Nanticoke River and thence to Chesapeake Bay, and part flows eastward toward Delaware Bay. Ditching and the clearing of natural streams has dried up much of the swamp, improving nearby farmland to some extent but exposing former peat bogs to the danger of underground fires.”

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“Right on this road (Redden Road)

EPA Ecoregions

According to the EPA’s definition of ecoregions, the Ellendale-Milton Area is located within the Delmarva Uplands ecoregion of the Middle Atlantic Coastal Plain.

The Middle Atlantic Coastal Plain ecoregion is a low, nearly flat plain, with many swampy or marshy areas that extend northeastward from Georgia to New Jersey. Forest cover in the region is predominantly loblolly-shortleaf pine with patches of oak, gum, and cypress near major streams. Poorly drained soils are common especially in lowest areas.

The Delmarva Uplands Ecoregion encompasses the nearly level to gently rolling, uplands of the Delmarva Peninsula. It includes sandy ridges, swales, low paleodunes, and the central ridge of the peninsula. Marshes and swamps are far less extensive than in the bordering ecoregions but, nevertheless, do occur and include the Great Cypress Swamp of southern Delaware. Elevations range from about 20 to less than 100 feet (6-30 m) and local relief is less than 50 feet. Flat interfluves occur on the central ridge and are often poorly drained.

Unconsolidated Quaternary sands, silts, clays, shells, and gravels underlie this Ecoregion. Gravelly sediments are found on the upland surface from near the head of Chesapeake Bay south to an irregular line connecting Milford, Delaware and Cambridge, Maryland.

The originally natural vegetation was mostly Oak-Hickory-Pine Forest. The growing season is long, 175 to 225 days, and rainfall is both well distributed and adequate. This area is home to the most intensive row crop agriculture on the Delmarva Peninsula. It produces corn, soybean, small fruit, and truck crops. In addition, poultry, livestock, and dairy farms are widespread and are economically important. Commercial woodland also occurs. Sandy soils are nutrient poor and have a limited water holding capacity. Other less permeable soils require artificial drainage to be farmed.

Streams and rivers are often flanked by riparian woodland. They are generally low in gradient, often tidally influenced, and have wide valleys. Many streams in this ecoregion have been straightened and deepened to improve drainage. Inter-watershed connections in headwater areas are not uncommon. Streams on the well-drained uplands have riffle sections with gravelly bottoms.

The ecoregion’s boundaries are shown on the map entitled EPA Delmarva Uplands Ecoregion. The western boundary of the ecoregion coincides with the Chesapeake-Albemarle Silty Lowlands and Tidal Marshes.

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To the south of the Town lies the Lower Peninsula/Cypress Swamp zone of Delaware. The landscape is relatively flat and well watered. The water table is high with extensive ditching required to make the land usable for agriculture. To the west, the Gravelly Branch drains into the Nanticoke River and Chesapeake Bay. To the northeast and east, Church Branch drains into Cedar Creek, while Sowbridge Branch drains into the Broadkill River. Ellendale is 50 feet above sea level. The Cypress Swamp is an extensive marsh and swamp that historically was a major source for lumber and bog iron. It presently has the northernmost stand of bald Cypress trees in the United States.

DNREC has identified two natural Greenway areas that involve Ellendale. The Greenway to the west is the Nanticoke River Greenway. The Greenway to the east is the Broadkill Greenway.

USGS Depiction of Ellendale's Natural Resources

The portion of a USGS map entitled Ellendale's Natural Environment shows the Town, forests, swamp, greenways, connecting waterways and wooded areas, illustrating both the hydrology and topography of the Study Area.

The two maps entitled Nanticoke River Watershed and Delaware Bay Estuary Watershed show the extents of the two major watersheds and the tributaries and development centers within them.

DelDOT Environmental Inventory Maps

Traffic, Terrestrial Resources, Socio-Economic Resources, Cultural and Historic Properties, and LESA (Land Evaluation Site Assessment Model) maps are included from the February 2004 DelDOT US 113 North/South Study Environmental Inventory – Ellendale Area.

DNREC Natural Resource Mapping

DNREC has provided a series of GIS maps describing natural conditions within the Study Area.

Town of Ellendale shows the area of the incorporated Town, showing current municipal boundaries, waterways and ditches, parcels and roads, railroads, existing forested lands and urban conditions superimposed over a 2002 orthographic photograph of the area.

Aerial Photographs from 1937 and 2002 presents vertical aerial photographs from 1937 and 2002 in order to dramatically illustrate the changing landscape, streetscape and built environment of the Study Area. By 1937, the DuPont Boulevard, US Route 113, was 20 years old but, with the exceptions of several small commercial and residential parcels on the east side of the new boulevard, some development at the ends of Sharon Street and

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some Mixed-Use growth at the Main Street/Old State Road intersection, very little development had occurred. The 1937 photograph was taken in the midst of an international depression. By 2002, we see the additional development which has occurred along today's Route 16 west of the Town, along Sharon Road, along DuPont Boulevard and along the east side of Old State Road to the north. There is also more extensive development along South Old State Road. Within the Town, the northeast corner has grown by approximately two dozen homes.

Groundwater Recharge Areas depicts areas of excellent or good groundwater recharge capacity. Much of the Study Area northeast, east and south of the Town has good recharge capacity. Between Ponder Street and Us 113, along Route 16, lies an area of excellent and good recharge capacity. Other areas of excellent capacity include areas along Reynolds Pond Road, Route 16 east of Peachtree Orchard Road and south along Spicer Road.

Sewer District shows the limits of the new Sussex County Ellendale-New Market Sewer District. It also shows public use well locations and the locations of private septic systems.

Forested Areas Map shows the extent of forested areas in and around Ellendale. DNREC classified forested areas into those of more than 25 acres, those less than 25 acres and riparian forest areas in order to illustrate the extent of large forested "blocks" and riparian corridors.

Wetlands shows the extent of wetlands in and around Ellendale. The wetland boundaries shown were developed by the Statewide Wetland Mapping Project. State law regulates stream disturbances. Federal law protects the wetlands within the Study Area.

Riparian Buffers depicts the waterways, including ditches, within the Study Area and a 100-foot buffer along each waterway. DNREC recommends that riparian buffers of at least 100 feet in width be preserved when development occurs near a waterway. Riparian buffers provide important habitat and water quality benefits.

Forest Legacy and State Resource Areas shows the current boundaries of the planned Redden Forest Legacy area as well as current State Resource Areas. The Forest Legacy area has been identified by the State of Delaware for forest conservation through purchase of conservation easements or fee simple land acquisition under the Green Infrastructure and related programs. The State resource Area boundaries include protected State, Federal, local, and private conservation lands and in-holdings as well as planned additions. Implementation measures include state or non-profit purchase, purchase or donation of development rights and the establishment of agricultural districts.

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❑ Soil Conditions, Geology and Hydrology

The following descriptions of Ellendale's three major stream tributaries are based on Delaware's Outstanding Natural areas and Their Preservation, by Lorraine M. Fleming, Delaware Nature Education Society, Hockessin, Delaware, 1978.

Sowbridge Branch

Streams and ditches flowing to the Sowbridge Branch rise along the east edge of the Ellendale Swamp and connect it eastward to the Broadkill River and the Delaware Bay Estuary at Lewes. The Branch flows to Reynolds Pond and then to Waples Pond. This tributary corridor is known for rich habitat diversity and visual variety. Within the Atlantic white cedar growth west of Reynolds Pond grows the insectivorous northern pitcher plant (*Sarracenia purpurea*) on sphagnum moss mounds. Within the understory of the Cedar growth are sweet gum, red maple, sweetbay magnolia, with inkberry and swamp azalea and spineleaf moss in the shrub layer.

Reynolds Pond, largely silted in, contains duckweed, arrow arum, water pennywort, fragrant water-lily, water-willow, golden club and swamp rose. Water oak, Atlantic white cedar, Spanish oak, red maple, American holly, high bush black blueberry, sweet bay magnolia, and laurel-leaf greenbrier are also present.

Lorraine Fleming identified the Sowbridge Branch as deserving high priority for preservation both as a habitat for a rare species and because of its ecological diversity. The Branch is very close to the former Queen Anne's Railway Line and a Greenway Trail at this location could open up many opportunities for nature education along Sowbridge Branch.

Cedar Creek

Ditches feeding Church Branch rise at the east end of Willow Street, in the area of Cemetery Road and at Holly Tree Road and flow northward to connect with Cedar Branch and Delaware Bay. Woodlands occur in many places along this path. The corridor is known for its Atlantic white cedar, red maple, green ash, black gum, loblolly and pond pine. Lorraine Fleming describes Cedar Creek as an "idyllic stream segment with abundant white cedar." She notes the presence of seaside alder, bayberry, sweet pepper-bush, redberry greenbrier, poison ivy and swamp rose, among others.

With regard to Cedar Creek itself, she mentions that it is frequently turbid, dissolved oxygen is sporadically low and fecal coliform levels exceeded state standards for contact recreation. She concluded that the area merits the highest priority for preservation, which she said could be achieved "only by maintaining the present status of relative inaccessibility".

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The Delaware Geological Survey Geologic Map Of The Ellendale And Milton Quandrangles, Delaware - Geologic Map Series No. 11 has defined the following geological classifications in the Ellendale-Milton Area.

Marsh And Swamp Deposits (Qm Qsw)

Marsh deposits consist of structureless to finely laminated, black to dark gray, organic-rich silty clay to clayey silt with discontinuous beds of peat and with rare shells. In place or transported fragments of marsh grasses such as *Spartina* are common. Up to 30 feet in thickness. Includes some clayey silts of estuarine channel origin. Interfingers with swamp deposits and unconformably overlies sands of the Scotts Corners, Lynch Heights, and older subcropping formations. Mapped on the basis of distribution of salt-tolerant marsh grasses. Holocene. Swamp deposits consist of structureless, black to brown, organic-rich, silty and clayey, fine to coarse quartz sand with thin interbeds of medium to coarse quartz sand. Organic particles consists of leaves, twigs, and larger fragments of deciduous plants. Near the coast, the swamp deposits fine upwards and grade laterally with marsh deposits and overlie the Scotts Corners, Lynch Heights, and Beaverdam and older subcropping formations. Up to 20 feet in thickness.

Mapped on the basis of presence of deciduous vegetation in stream valleys. In the upper reaches of streams, contains alluvial deposits consisting of fine to coarse quartz sand with pebbles. Scattered upland swamps are common throughout the central and southern portions of the Ellendale Quadrangle. Swamp deposits in these areas are similar to those found in stream valleys but have much less organic-rich sediment. They are similar in stratigraphic position and presumed age to the Cypress Swamp Fm and unconformably overlie the Quaternary upland deposits or Beaverdam Fm. (Andres and Howard, 2000) found to the south. Holocene.

Scotts Corners Formation (Qsc)

Heterogeneous unit of light gray to brown to light yellowish brown, coarse to fine sand with discontinuous beds of organic-rich clayey silt, clayey silt, coarse to very coarse quartz sand, and pebble gravel. Sands are quartzose with (<10%) feldspar and muscovite. Commonly capped by one to two feet of silt to fine sandy silt. Laminae of opaque heavy minerals are common. Unconformably overlies the Lynch Heights Fm. The basal contact is marked by coarse sand to gravelly sand bed overlying an oxidized, compact horizon (paleosol) at the top of the Lynch Heights. Overall thickness of the unit rarely exceeds 15 feet. The Scotts Corners is interpreted to be a transgressive unit consisting of swamp, marsh, estuarine channel, beach, and bay deposits. Climate during the time of deposition was temperate to warm temperate as interpreted from the fossil pollen assemblages (Ramsey, 1997). Late Pleistocene.

Beaverdam Formation (Tbd)

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A thick (greater than 30 feet) heterogeneous unit of light yellowish brown, reddish brown, white, to very light gray fine to coarse sand. Beds of fine sand, medium to coarse sand, and granule sand dominate the unit. Rare, thin (< 2 ft thick) beds of reddish brown to greenish gray clayey silt are present. It unconformably overlies the St. Marys and Manokin fms. The unit has characteristics common to both the Columbia Formation (Ramsey 1993; 1997) to the north and the Beaverdam Fm. (Andres and Ramsey, 1995) to the south and east. As both units are predominately sand and have similar lithologies, sedimentary structures, and colors, they cannot be definitively differentiated in this area due to a lack of diagnostic pollen-bearing beds.

Quaternary Upland Deposits (Qud)

Quaternary upland deposits consist of sheets and small dunes of structureless, white to tan to light gray, fine to very fine sand with discontinuous beds of medium to coarse sand and rare pebbles. Beds of clayey sand and clayey silt are common in areas adjacent to upland swamps. Up to 15 feet in thickness. The unit is recognized by the general lack of sedimentary structures, finer sand sizes and lighter colors than the underlying Beaverdam Fm. Thin pebble layers commonly mark the contact with the underlying Beaverdam Fm. These deposits are interpreted to be the result of eolian deposition during the cold climate of the late Pleistocene and early Holocene (Andres and Howard, 2000). Late Pleistocene to early Holocene.

The attached section from the Geological Map identifies the aquifers which underly the Study Area.

The Delaware Geologic Survey is providing additional technical materials about hydrology and geology in the Study Area, and will assist the planning team with the Greater Ellendale Water System Feasibility Analysis.

Soils Classifications

The map entitles Greater Ellendale Area Soil Classifications depicts individual soil classifications according to the 1974 Sussex County Soil Survey.

The following describes predominant soil classifications and their properties in the Study Area, based on reports are generated from the National Soil Information System soil database and the 1974 Sussex County Soil Survey.

The following are general descriptions of the classifications present in the Study Area:

Bo – BORrow Pits

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A small borrow pit exists on the west side of US 113 at VFW Road. The assigned Kw factor, which measures susceptibility to sheet and rill erosion by water, for this classification is .17. The slowest permeability within 60 inches is rapid. Available water capacity is moderate and shrink swell potential is low. This soil is not flooded and is not ponded. The water table is deeper than 6 feet. It is in nonirrigated land capability class 8s. This component is not a hydric soil.

EoD -- Evesboro Sand, 5 To 15 Percent Slopes

A small area of this type of Evesboro Sand exists in the northeast corner of the Study Area. The assigned Kw erodibility factor is .17. Typically, its setting is on stream terraces and side slopes. This soil is excessively drained. The slowest permeability within 60 inches is moderately rapid. Available water capacity is high and shrink swell potential is low. This soil is not flooded and is not ponded. The water table is deeper than 6 feet. It is in nonirrigated land capability class 7s. This component is not a hydric soil.

EvA--Evesboro Loamy Sand, Loamy Substratum, 0 To 2 Percent Slopes

Instances of Evesboro Loamy Sand are scattered through the Study Area and typically involves farmland of statewide importance. The Evesboro soil also occurs within the Ellendale swam. The assigned Kw erodibility factor is .17. This soil is deep, rapidly permeable and excessively drained. The slowest permeability within 60 inches is very slow. Available water capacity is very high and shrink swell potential is low. This soil is not flooded and is not ponded. The water table is deeper than 6 feet. It is in nonirrigated land capability class 3s. This component is not a hydric soil.

EvB--Evesboro Loamy Sand, Loamy Substratum, 2 To 5 Percent Slopes

This Evesboro component also typically involves farmland of statewide importance. The assigned Kw erodibility factor is .17. This soil is excessively drained. The slowest permeability within 60 inches is very slow. Available water capacity is very high and shrink swell potential is low. This soil is not flooded and is not ponded. The water table is deeper than 6 feet. It is in nonirrigated land capability class 3s. This component is not a hydric soil.

Fa - Fallsington Sandy Loam

Instances of Fallsington Sandy Loam occur in the southwest quadrant of the Study Area, in or adjacent to the Ellendale swamp and South Old state Road. The Fallsington component is prime farmland if drained. The assigned Kw erodibility factor is .24. This soil is poorly and very poorly drained (hydric) soils characteristic of wetlands. It has severe limitations for development. The slowest permeability within 60 inches is moderately slow. Available water capacity is very high and shrink swell potential is low. This soil is not flooded and is not ponded. The top of the seasonal high water table is at 6 inches. It is in nonirrigated land capability class 3w. This component is a hydric soil.

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K1 - Klej Loamy Sand

Klej Loamy Sand occurs around the intersection of Delaware Route 16/Main Street and Old State Road. The largest portion of the area of the Town east of the Detox Center both north and south of Main Street and extending east to Ponder Street and north to the limit of the Study Area is Klej Loamy Sand. There are also instances in the eastern and southeastern portions of the Study Area. K1 soil occurs in portions of the Ellendale Swamp. Typically, it involves farmland of statewide importance. The assigned Kw erodibility factor is .17. Klej is a moderately well drained to somewhat poorly drained soil of low-lying uplands that have moderate to somewhat severe limitations for development. The slowest permeability within 60 inches is very slow. Available water capacity is very high and shrink swell potential is low. This soil is not flooded and is not ponded. The top of the seasonal high water table is at 18 inches. It is in nonirrigated land capability class 3w. It is not a hydric soil.

Os--Osier Loamy Sand

Small areas of Osier Loamy Sand occur in the Ellendale swamp areas. The general classification often involves farmland of statewide importance. The assigned Kw erodibility factor is .10. This soil is poorly drained. The slowest permeability within 60 inches is rapid. Available water capacity is high and shrink swell potential is low. This soil is rarely flooded and is not ponded. The top of the seasonal high water table is at 3 inches. It is in nonirrigated land capability class 3w. This component is a hydric soil.

Pm--Pocomoke Sandy Loam

Pocomoke Sandy Loam soils occur north of Route 16 and west of Old state Road, south of Sharon Road and in large areas of the Ellendale swamp. This soil can be prime farmland if drained. The assigned Kw erodibility factor is .20. This soil is poorly and very poorly drained (hydric) soils characteristic of wetlands. It has severe limitations for development. The slowest permeability within 60 inches is moderate. Available water capacity is very high and shrink swell potential is low. This soil is not flooded and is not ponded. The top of the seasonal high water table is at 0 inches. It is in nonirrigated land capability class 4w. This component is a hydric soil.

Wo--WOODstown Sandy Loam

Woodstown Sandy Loam occurs in the northern and western portions of the Study Area and in the triangle between US 113, Sharon Road and Route 16. All areas are prime farmland. The assigned Kw erodibility factor is .24. This soil is moderately well drained. The slowest permeability within 60 inches is moderately slow. Available water capacity is very high and shrink swell potential is low. This soil is not flooded and is not ponded.

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The top of the seasonal high water table is at 30 inches. It is in nonirrigated land capability class 2w. This component is not a hydric soil.

Hydric Soils

As the Map entitled Wetland Resources indicates, there are significant occurrences of hydric soils in the Study Area. This is especially true in the area between Washington Avenue and US 113, both north and south of DE Route 16. Hydric soils are poorly drained soils that are defined by the National Technical Committee for Hydric Soils (NTCHS) as soils that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part (Federal Register, 1994). These soils are either saturated or inundated long enough during the growing season to support the growth and reproduction of hydrophytic vegetation.

The Nanticoke River Watershed

Ellendale lies at the junction of the Nanticoke River and Chesapeake Bay and the Delaware Bay Estuary watersheds. The Nature Conservancy, together with other conservation organizations, is pursuing an active conservation program for lands within the watershed. Lying between the Atlantic Ocean and the Chesapeake Bay, the Nanticoke River weaves through the heart of the Delmarva Peninsula draining 725,000 acres of coastal plain landscape on Maryland's Eastern Shore and southwestern Delaware.

Numerous small headwater streams feed into the major tributaries of the River. The main stem's head of tide occurs just north of Middleford, DE. The Nanticoke widens as it flows downstream into Maryland, where it becomes brackish near the Town of Vienna, south of the confluence with the freshwater Marshyhope. Before entering the Chesapeake Bay, Nanticoke waters merge with the Blackwater River to the west, forming a vast area of estuarine tidal marsh and shallow open-water habitats known as Fishing Bay and Tangier Sound. Salinities in the river system range from freshwater (less than .5ppt) to 10 to 18 ppt depending on the season. The project area is the entire Nanticoke River watershed.

The Nanticoke River watershed lies in a rural landscape dominated by agriculture (48% of the land area). Crops are primarily grown as feed for poultry, which is now one of the leading industries on the Delmarva Peninsula. About 40% of the watershed is forested, with most of that cover consisting of forested floodplains and wetlands along rivers and creeks, or other low, seasonally wet woods. Most of the original native forest has been converted and/or fragmented by agriculture or development or is used for timber production (private and commercial). The total population of the watershed is about 90,000, with urban/suburban development comprising about 3% of the land. Residential development is spreading around population centers like Salisbury, Federalsburg, Seaford, and Ellendale. The local economy is a mix of manufacturing, trade and service

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industries. Commercial and industrial developments are concentrated in and around the larger towns.

The Nanticoke is considered one of the most ecologically significant watersheds in the mid-Atlantic region. With a wide range of freshwater to brackish wetland communities and several distinct upland communities, the watershed harbors a vast array of both rare and common species and unique natural habitats. Over 200 plant species and almost 70 animal species that are rare, threatened or endangered have been documented in the watershed. Globally rare species (G3G4 or higher) include over 20 plants and 5 animal species. The watershed also provides important habitat for large numbers of migratory waterfowl and neotropical migratory birds, and makes a significant contribution to the ecological health of the Chesapeake Bay.

This community type includes three categories: (1) Freshwater Intertidal Marsh (including mud flats and sand flats) covering 5000 acres of the watershed with plant species that include wild rice, spatterdock and pickerelweed; (2) Freshwater Intertidal Swamp Forest covering 7000 acres with red maple, green ash and black gum and; (3) Freshwater Intertidal Shrub Swamp consisting of 500 acres with the plant species including alder and small maples and ash. The tidal freshwater wetlands of the Nanticoke are notably diverse, providing habitat for a wide array of plant and animal species. These systems are also key to protecting water quality of adjacent aquatic systems from excess sediment, nutrient and toxic substances. They serve as important spawning and nursery areas for anadromous fish and support a significant benthic community. As many as 25 rare plants have been documented in the Nanticoke's freshwater tidal wetlands, including 6 globally rare species. Threats to freshwater tidal wetlands of the watershed include excess nutrient and sediment input from surrounding development and agricultural uses.

Occurring in the upland areas of the Nanticoke watershed, ancient xeric dunes are gently sloping sandy ridges that were formed 13,000 to 30,000 years ago out of the underlying Parsonsburg Sand formation. Ancient dunes are found scattered over Delmarva, but they are particularly well developed along the east side of the Nanticoke River and Marshyhope Creek. The smaller dunes are rather inconspicuous features on the landscape, but larger ones (12 meters in height, 1500 meters in length) are notable in a relatively flat coastal plain context. The dunes are usually dominated by Virginia pine and oaks. Lichens - especially reindeer moss- and bryophytes are important components of the community. The sandy soil is nutrient-poor with low water-retention capacity. The dunes harbor globally rare pine-barren gerardia, cream-flowered tick-trefoil and box huckleberry. Many dune complexes have been converted by agriculture or forestry or destroyed by development.

This habitat type, in which Atlantic white cedar dominates the forest, can be found just above the regularly flooded intertidal swamp zone along rivers, as well as in palustrine wooded wetlands away from rivers. Once much more common, the white cedar swamps have significantly diminished as a result of past logging for shipbuilding. In mature

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stands, Atlantic white cedar may occupy up to half of the canopy, with red maple, ash and other hardwoods making up the remainder. Rare plant species found in cedar swamps include seaside alder, Collin's sedge, Mitchell's sedge, and Southern twayblade. Atlantic white cedars also serve as the host of the Hessel's hairstreak, a globally rare butterfly.

Riverine aquatic habitats are tidal or non-tidal waters that lack persistent emergent vegetation, but may include areas with submerged or floating-leaved aquatic vegetation. High quality aquatic communities such as freshwater mussel assemblages, important fish habitat including spawning areas for anadromous fishes (e.g. striped bass, white and yellow perch, herring species) and submerged aquatic vegetation (SAV) beds will be a priority for protection.

Currently 40% of the Nanticoke watershed remains under forest cover. But this total includes extensive forested wetlands along rivers and streams and an undetermined, but substantial acreage in pine plantations for timber production. Much of the native oak/hickory upland forest has been eliminated through conversion to agricultural land and residential uses. Remaining forest is highly fragmented and often too wet for productive agricultural use. However, large tracts of remaining native forest provide important breeding and stopover habitat for neotropical migratory birds, as well as habitat for the federally endangered Delmarva fox squirrel and a number of declining amphibian and reptile species. They are also crucial to protecting the quality of adjacent wetland and aquatic systems by filtering excess pollutants in surface and groundwater. These forest complexes, which include a mosaic of wetter flatwood stands and drier oak/hickory forest communities, are desirable for protection and restoration. Nanticoke Wildlife Area includes over 4000 acres of native hardwood forest.

The Delaware Bay Estuary Watershed

The Delaware Bay Estuary includes the Delaware Bay, the Delaware River and the land that surrounds its tributaries – a total of 795 square miles in Delaware. Pollution and loss of wetlands are among the biggest problems facing the Delaware Estuary. Estuary means the place where the river mixes with the sea.

Fifty-four percent of Delaware's wetlands have been deforested and ditched for agriculture and development. Until World War II, untreated sewage flowed into the Delaware River. Rainwater runoff carried nutrients, pesticides, PCBs, and metals into the river. For 150 years, commercial fishing had been a major industry. But in the early 12900's, pollution and over-fishing caused the industry to crash. By 1940, Atlantic sturgeon and American shad harvests were reduced to almost nothing. The river had developed a 20-mile 'dead zone', where oxygen levels were too low to sustain life.

In 1936, the first major inter-state clean up effort began by requiring the construction of sewage treatment plants. In the 1960s, a four-state Delaware River Basin Commission began setting limits on industrial pollution discharged into the river. The passage of the

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federal Clean Water Act and the Coastal Zone Management Act in the early 1970s made balancing the ecological and economic needs along coastal zones a priority. Currently, the Delaware River quality is better than it has been in the last 50 years.

The potential for pollution remains. Thermal, or heat pollution, occurs when electric generating stations use estuary water to cool the turbines that make electricity, then return heated water to the river⁶

B. Community Profile

The Town of Ellendale is growing at a moderate rate. In past decades, Town population has grown or declined in response to economic conditions, as shown in Table 1, which shows population changes that have occurred over the past century. Population has grown and declined in response to local, regional and national economic forces.

Table 1
The 2004 Greater Ellendale Comprehensive Plan
Town of Ellendale Population Change, 1900-2000

US Census Year	Town of Ellendale Population	% Change From Previous Decade
1900	200	N/a
1910	216	8%
1920	N/a	N/a
1930	268	N/a
1940	287	7%
1950	321	12%
1960	370	16%
1970	399	8%
1980	361	-9.5%
1990	289	-19.9%
2000	327	13%

Source: Ellendale – “Reminiscing The Past”, U.S. Census Bureau, & Nutter Associates

The national census encyclopedia Wikipedia indicates that, as of the census of [2000](#), there are 327 people, 113 households, and 82 families residing in the town. The population density is 2 persons per acre. There are 128 housing units at an average density of 500 units per square mile, or .78 units per acre. The racial makeup of the town is 55.35% White, 37.92% [African American](#), 0.61% [Native American](#), 0.31% [Asian](#), 0.00% Pacific Islander, 4.59% from other races, and 1.22% from two or more races. 4.59% of the population is [Hispanic](#) or [Latino](#) of any race.

There are 113 households out of which 31.0% have children under the age of 18 living with them, 52.2% are married couples living together, 15.9% have a female householder with no husband present, and 27.4% are non-families. 23.0% of all households are made

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up of individuals and 13.3% have someone living alone who is 65 years of age or older. The average household size is 2.83 and the average family size is 3.33.

In the town the population pyramid is spread out with 26.6% under the age of 18, 8.0% from 18 to 24, 27.8% from 25 to 44, 24.2% from 45 to 64, and 13.5% who are 65 years of age or older. The median age is 38 years. For every 100 females there are 94.6 males. For every 100 females age 18 and over, there are 89.0 males.

The median income for a household in the town is \$37,083, and the median income for a family is \$42,841. Males have a median income of \$21,875 versus \$17,614 for females. The per capita income for the town is \$14,831. 15.3% of the population and 7.2% of families are below the poverty line. Out of the total people living in poverty, 32.3% are under the age of 18 and 22.2% are 65 or older.

Table 2 compares the population growth in Ellendale between 1990 and 2000 with population growth in Zip Code Area 19941, Sussex County, the State of Delaware, the United States and the World. The Town of Ellendale's average annual rate of population growth between 1990 and 2000 is less than one-third that of Sussex County, which grew dramatically at an average annual rate of 3.8%, and more than twice as fast as the state, the nation or the world. Population growth in Sussex is concentrated in the beach, or eastern, area of the county, but appears to be working its way to the west. Under normal conditions, Ellendale can be expected to experience more rapid population growth in the decades to come.

Table 2
The 2004 Greater Ellendale Comprehensive Plan
Town of Ellendale Population Change, 1990-2000
By Comparison with Zip Code Area 19941, Sussex County, the State of Delaware, the United States
and World Population Change

	Town of Ellendale	Zip Code Area 19941	Sussex County	State of Delaware	United States of America	World Population
1990 Pop.	289	2,008	113,229	666,157	248,709,873	5.2 billion
2000 Pop.	327	2,302	156,638	783,600	281,421,906	6 billion
10-Year Growth	38	294	43,409	117,443	32,712,033	790 million
1990-2000 Average Annual Growth	1.31 %	1.46 %	3.83 %	1.76 %	1.32 %	1.52 %

Source: U.S. Census Bureau, United Nations and Nutter Associates

Table 3 presents the population composition of Ellendale by sex and age in 2000, in comparison with the county and state. The population of Ellendale is younger than that of the county or state, with significantly more persons under the age of 34, and significantly fewer persons older than 55. The numbers of males and females are identical with the county and state.

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Table 3
The 2004 Greater Ellendale Comprehensive Plan
Town of Ellendale Census 2000 General Demographic Characteristics
Sex and Age
In Comparison with Sussex County and the State of Delaware

	Town of Ellendale		Sussex County		State of Delaware	
	Number	Percent	Number	Percent	Number	Percent
Total population	327	100.0	156,638	100.0	783,600	100.0
SEX AND AGE						
Male	159	48.6	76,528	48.9	380,541	48.6
Female	168	51.4	80,110	51.1	403,059	51.4
Under 5 years	17	5.2	9,009	5.8	51,531	6.6
5 to 9 years	28	8.6	9,960	6.4	55,813	7.1
10 to 14 years	30	9.2	10,250	6.5	55,274	7.1
15 to 19 years	23	7.0	9,480	6.1	55,632	7.1
20 to 24 years	15	4.6	7,556	4.8	51,665	6.6
25 to 34 years	41	12.5	17,811	11.4	108,840	13.9
35 to 44 years	50	15.3	23,425	15.0	127,601	16.3
45 to 54 years	47	14.4	21,312	13.6	103,999	13.3
55 to 59 years	20	6.1	9,615	6.1	39,320	5.0
60 to 64 years	12	3.7	9,198	5.9	32,199	4.1
65 to 74 years	24	7.3	17,091	10.9	56,415	7.2
75 to 84 years	16	4.9	9,362	6.0	34,762	4.4
85 years and over	4	1.2	2,569	1.6	10,549	1.3
Median age (years)	37.9	(X)	41.1	(X)	36.0	(X)

Source: U.S. Census Bureau & Nutter Associates

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Table 4 presents data on the racial composition of the Town of Ellendale population. The percentage of white residents is 55.4% in Ellendale compared with 80.3% in Sussex County and 74.6% in the State of Delaware. The percentage of black or African American residents is 37.9 % in Ellendale, as compared with 14.9 in Sussex County and 19.2 % in the State of Delaware.

Table 4
The 2004 Greater Ellendale Comprehensive Plan
Town of Ellendale Census 2000 General Demographic Characteristics
Race
In Comparison with Sussex County and the State of Delaware

	Town of Ellendale	Sussex County	State of Delaware
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RACE						
One race	323	98.8	154,519	98.6	770,567	98.3
White	181	55.4	125,857	80.3	584,773	74.6
Black or African American	124	37.9	23,319	14.9	150,666	19.2
American Indian and Alaska Native	2	0.6	946	0.6	2,731	0.3
Asian	1	0.3	1,172	0.7	16,259	2.1
Native Hawaiian and Other Pacific Islander	0	0.0	68	0.0	283	0.0
Some other race	0	0.0	3,157	2.0	15,855	2.0
Two or more races	0	0.0	2,119	1.4	13,033	1.7

Source: U.S. Census Bureau & Nutter Associates

Table 5 presents household composition data. The percentage of “Married couple-families with own children under 18” years old is 17.7% in the Town as compared with 18.4% in the county and 21.9% in the state. The category Female householder, no husband present” is 15.9% in the Town as compared with 11.3% in the county and 13.1% in the state. There is a somewhat higher percentage of “Householder 65 years and older” in the Town than in the County or State. Average household sizes are higher in the Town than in the County or State.

Table 5
The 2004 Greater Ellendale Comprehensive Plan
Town of Ellendale Census 2000 General Demographic Characteristics
Household Composition
In Comparison with Sussex County and the State of Delaware

	Town of Ellendale		Sussex County		State of Delaware	
HOUSEHOLDS BY TYPE						
Total households	113	100.0	62,577	100.0	298,736	100.0
Family households (families)	82	72.6	43,869	70.1	204,590	68.5
With own children under 18 years	35	31.0	16,989	27.1	95,175	31.9
Married-couple family	59	52.2	34,353	54.9	153,136	51.3
With own children under 18 years	20	17.7	11,524	18.4	65,535	21.9
Female householder, no husband present	18	15.9	7,100	11.3	38,986	13.1
With own children under 18 years	11	9.7	4,180	6.7	22,975	7.7

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Nonfamily households	31	27.4	18,708	29.9	94,146	31.5
Householder living alone	26	23.0	15,235	24.3	74,639	25.0
Householder 65 years and over	15	13.3	6,971	11.1	27,071	9.1
Households with individuals under 18 years	43	38.1	19,249	30.8	105,833	35.4
Households with individuals 65 years and over	33	29.2	19,883	31.8	71,466	23.9
Average household size	2.83	(X)	2.45	(X)	2.54	(X)
Average family size	3.33	(X)	2.88	(X)	3.04	(X)

Source: U.S. Census Bureau & Nutter Associates

Table 6 presents school enrollment and educational attainment data for the Town of Ellendale. In the Year 2000, 62% of the Town's school age population had graduated from high school.

Table 6
The 2004 Greater Ellendale Comprehensive Plan
Town of Ellendale Census 2000 General Demographic Characteristics
Educational Attainment
In Comparison with Sussex County and the State of Delaware

SCHOOL ENROLLMENT	
Persons 3 years and over enrolled in school	92
Preprimary school	0
Elementary or high school	81
Percent in private school	9.9
College	11
EDUCATIONAL ATTAINMENT	
Persons 25 years and over	210
Less than 9th grade	16
9th to 12th grade, no diploma	64
High school graduate	72
Some college, no degree	24

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Associate degree	6
Bachelor's degree	15
Graduate or professional degree	13
Percent high school graduate or higher	61.9
Percent bachelor's degree or higher	13.3

Source: U.S. Census Bureau & Nutter Associates

Table 7 presents Housing Occupancy and Tenure data. Ellendale's vacancy rate is significantly lower than that of the County's and slightly lower than the state's. The County's rate is strongly influenced, however, by the number of seasonal dwelling units in the beachfront areas. Ellendale's renter-occupancy rate, at 48.5 %, is significantly higher than either the county or the state. The "Average household size of renter-occupied unit", at 3.46 persons per unit, is significantly higher than either the County or State.

Table 7
The 2004 Greater Ellendale Comprehensive Plan
Town of Ellendale Census 2000 General Demographic Characteristics
Housing Occupancy and Tenure
In Comparison with Sussex County and the State of Delaware

	Town of Ellendale		Sussex County		State of Delaware	
HOUSING OCCUPANCY						
Total housing units	128	100.0	93,070	100.0	343,072	100.0
Occupied housing units	113	88.3	62,577	67.2	298,736	87.1
Vacant housing units	15	11.7	30,493	32.8	44,336	12.9
For seasonal, recreational, or occasional use	1	0.8	24,906	26.8	25,977	7.6
Homeowner vacancy rate (percent)	3.3	(X)	2.1	(X)	1.5	(X)
Rental vacancy rate (percent)	7.1	(X)	13.4	(X)	8.2	(X)
HOUSING TENURE						
Occupied housing units	113	100.0	62,577	100.0	298,736	100.0
Owner-occupied housing units	87	77.0	50,484	80.7	216,038	72.3
Renter-occupied housing units	26	23.0	12,093	19.3	82,698	27.7
Average household size of owner-	2.64	(X)	2.41	(X)	2.61	(X)

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occupied unit						
Average household size of renter-occupied unit	3.46	(X)	2.60	(X)	2.37	(X)

Source: U.S. Census Bureau & Nutter Associates

Table 8 describes employment status by age and gender. Ellendale's population in labor force is somewhat higher than either the county or state.

Table 8
The 2004 Greater Ellendale Comprehensive Plan
Census 2000 Selected Economic Characteristics
Labor Force Employment Status
Town of Ellendale
In Comparison with Sussex County and the State of Delaware

Subject	Town of Ellendale		Sussex County		State of Delaware	
			Number	Percent	Number	Percent
EMPLOYMENT STATUS						
Population 16 years and over	251	100.0	125,358	100.0	610,289	100.0
In labor force	175	69.7	73,325	58.5	401,152	65.7
Civilian labor force	175	69.7	73,161	58.4	397,360	65.1
Employed	169	67.3	69,596	55.5	376,811	61.7
Unemployed	6	2.4	3,565	2.8	20,549	3.4
Percent of civilian labor force	3.4	(X)	4.9	(X)	5.2	(X)
Armed Forces	0	0.0	164	0.1	3,792	0.6
Not in labor force	76	30.3	52,033	41.5	209,137	34.3
Females 16 years and over	128	100.0	64,929	100.0	319,154	100.0
In labor force	86	67.2	34,320	52.9	192,201	60.2
Civilian labor force	86	67.2	34,301	52.8	191,562	60.0
Employed	86	67.2	32,442	50.0	182,023	57.0
Own children under 6 years	14	100.0	10,306	100.0	57,950	100.0
All parents in family in labor force	10	71.4	6,519	63.3	37,817	65.3

Source: U.S. Census Bureau & Nutter Associates

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Table 9 presents a profile of General Demographic Characteristics for the 1990 and Year 2000 census years for the larger area included in the Year 2000 definition of Zip Code Area 19941. In order to draw a comparable comparison with the 1990 figures, the 1990 data has been adjusted to the Year 2000 Zip Code Area definition. The Year 2000 geographic limits of the Zip Code Area are presented in Map.

Zip Code Area 19941 grew by 14.6% over the decade, an average annual rate of 1.46%.

Table 9
The 2004 Greater Ellendale Comprehensive Plan
Zip Code Area 19941 Census 2000 General Demographic Characteristics
1990-2000 Comparison

	1990		2000		1990 - 2000	Change
Population Group	2,008		2,302		294	14.6%
	2	0.1%	7	0.3%	5	250.0%
Population By	1,251	62.3%	1,467	63.7%	216	17.3%
Race						
Black	710	35.4%	765	33.2%	55	7.7%
American	15	0.7%	18	0.8%	3	20.0%
Asian/Pacific	5	0.2%	3	0.1%	-2	-40.0%
Other Race	27	1.3%	49	2.1%	22	81.5%
Hispanic	50	2.5%	99	4.3%	49	98.0%
Diversity Index	49		50		1	2.0%
Population By	619	30.8%	662	28.8%	43	6.9%
Age						
18 - 64 Years	1,205	60.0%	1,394	60.6%	189	15.7%
65+ Years	184	9.2%	246	10.7%	62	33.7%
Median Age						16.7%
Population In	2,006		2,295		289	14.4%
In Families	1,795	89.5%	1,950	85.0%	155	8.6%
In Non-	211	10.5%	345	15.0%	134	63.5%
Households	699		806		107	15.3%
Families	528	75.5%	600	74.4%	72	13.6%
With Kids	316	59.8%	337	56.2%	21	6.6%
Non-family	171	24.5%	206	25.6%	35	20.5%
Average						-0.8%
Average						-4.4%
Average						35.7%
Population, 16+	995		1,156		161	16.2%
Employed	956	96.1%	1,103	95.4%	147	15.4%

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White	318	33.3%	462	41.9%	144	45.3%
Blue Collar	637	66.6%	641	58.1%	4	0.6%
Average	\$30,036		\$47,242		\$17,206	57.3%
Median	\$26,546		\$39,000		\$12,454	46.9%
Total Housing	771		891		120	15.6%
Occupied	699	90.7%	806	90.5%	107	15.3%
Owner-	544	77.8%	667	82.8%	123	22.6%
Renter-	155	22.2%	139	17.2%	-16	-10.3%
Average Home	\$61,261		\$82,724		\$21,463	35.0%
Median Home	\$53,974		\$75,290		\$21,316	39.5%
Average	\$228		\$356		\$128	56.1%
Median	\$242		\$409		\$167	69.0%

Table 10 compares the Year 2000 demographic profile of the Town with that of the surrounding 1.6 mile ring. It indicates that the demographic profiles of the two geographies are very similar. The percentage of black population is higher in the 1.6-mile ring as a whole than in the Town portion. In this table the data for the Town is included in the data for the 1.6 mile ring.

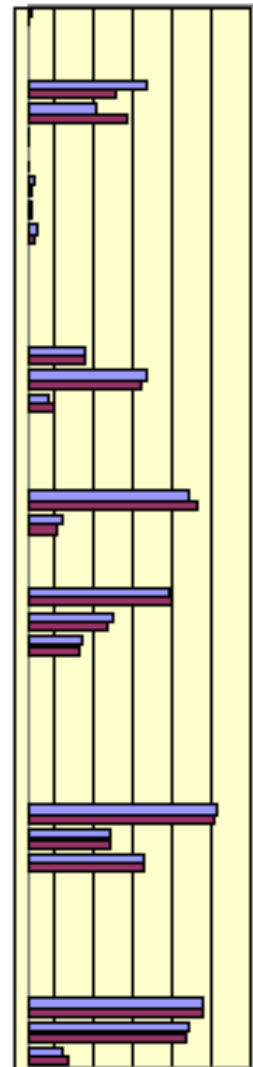
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Table 10
The 2004 Greater Ellendale Comprehensive Plan
Year 2000 General Demographic Characteristics
Comparison of Town of Ellendale and 1.6 Mile Ring

Benchmark Profile:
 Key Demographics 2000

Scan/US, Inc.

	Place 10-24020 Ellendale		Main St & Railroad Ave/1.6 Mi Ring		
Population	327		1,027		
Group Quarters	7	2.1%	7	0.7%	
Population By Race					
White	199	60.9%	465	45.4%	
Black	113	34.6%	517	50.4%	
American Indian/Alaskan	2	0.6%	5	0.6%	
Asian/Pacific Islander	0	0.0%	2	0.2%	
Other Race	8	2.4%	21	2.0%	
Multi-Race	5	1.5%	16	1.5%	
Hispanic Origin	13	4.0%	34	3.3%	
Diversity Index	50		49		
Population By Age					
< 18 Years	93	28.4%	303	29.5%	
18 - 64 Years	199	60.9%	595	58.0%	
65+ Years	34	10.4%	129	12.5%	
Median Age	35.6		35.0		
Population in Households	320		1,020		
in Families	262	81.9%	873	85.6%	
in Non-families	58	18.1%	147	14.4%	
Households	113		360		
Families	82	72.6%	265	73.7%	
With Kids	48	42.5%	147	40.7%	
Non-family	31	27.4%	95	26.3%	
Average Household Size	2.8		2.8		
Average Family Size	3.2		3.3		
Average Non-family Size	1.9		1.6		
Population, 18+ in Labor Force	165		495		
Employed	158	95.8%	472	95.2%	
White Collar	65	41.1%	197	41.7%	
Blue Collar	94	56.9%	275	55.3%	
Average Household Income	\$48,333		\$46,533		
Median Household Income	\$37,500		\$38,461		
Total Housing Units	127		402		
Occupied	113	89.0%	360	89.5%	
Owner-Occupied	93	82.3%	288	80.1%	
Renter-Occupied	20	17.7%	71	19.9%	
Average Home Value	\$77,764		\$76,105		
Median Home Value	\$75,111		\$72,605		
Average Contract Rent	\$327		\$357		
Median Contract Rent	\$350		\$395		



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Delaware Population Consortium Modified Grid Data and Projections

For comparison, the Delaware Population Consortium's Modified Grid small area data for 1990 and the Year 2000 were examined.

Within an approximate 1-mile ring area, including all Modified Grids touching on the ring, and including the Town's population, the 1990 population was 1,286 persons while the Year 2000 population was 1,246 persons, a decrease of 40 persons, or -3.1%, over this decade.

Within a 2-mile ring area around the Town, including all Modified Grids touching on the ring, and including the Town's population, the 1990 population was 2,833 and the Year 2000 population was 3,162 persons.

Unlike the 1-mile ring area, where population decreased, the 2-mile ring population experienced an increase of 329 persons, or 11.6% from 1990 to 2000, an average annual rate of increase of 1.16.

In terms of future population projections, it is noteworthy that Sussex County as a whole grew by an average annual rate of 3.8% between 1990 and the Year 2000. The Delaware Population Consortium is projecting Sussex County's population to grow at an average annual rate of 2.4% between the Year 2000 and the Year 2025, the time horizon of the Comprehensive Plan.

Within the present boundaries of the Town of Ellendale, (Modified Grid 3801320), population is projected to grow from 327 in the Year 2000 to a projected 380 by the Year 2025. This is a 25-year increase of 53 persons, or a 16% increase over 25 years, an average annual rate of .65%.

Within the 1-mile ring area, correcting the data for Modified Grid 13801240, the area of the Ellendale Swamp, population is projected to grow to 1,997 by 2025, an increase of 751 persons from the Year 2000 population of 1,246 persons for this area, representing a twenty five-year increase of 60%, or an average annual increase of 2.4%.

Within the 2-mile ring area, correcting the data for the Ellendale Swamp Area, population is projected to grow to 5,852 by 2025, an increase of 2,690 persons from the Year 2000 population of 3,162 persons for this area, a 25-year increase of 85%, or an average annual rate of 3.4% over the 25-year period.

Table 11 describes commutation patterns. Driving alone by car and carpooling by car, truck or van are the principal means of transportation for Town residents and in both cases are used more than by County or State residents as a whole. Mean travel time to work is 24.3 minutes, virtually identical with the County and State. The number of

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persons using public transit is negligible, although in a small community these numbers may not be accurately be recorded.

Table 11
The 2004 Greater Ellendale Comprehensive Plan
Census 2000 Selected Economic Characteristics
Commutation Patterns
Town of Ellendale
In Comparison with Sussex County and the State of Delaware

Subject	Town of Ellendale		Sussex County		State of Delaware	
	Number	Percent	Number	Percent	Number	Percent
COMMUTING TO WORK						
Workers 16 years and over	169	100.0	68,123	100.0	373,070	100.0
Car, truck, or van -- drove alone	145	85.8	54,173	79.5	295,413	79.2
Car, truck, or van -- carpooled	24	14.2	8,431	12.4	42,990	11.5
Public transportation (including taxicab)	0	0.0	445	0.7	10,354	2.8
Walked	0	0.0	1,528	2.2	9,637	2.6
Other means	0	0.0	740	1.1	3,585	1.0
Worked at home	0	0.0	2,806	4.1	11,091	3.0
Mean travel time to work (minutes)	24.3	(X)	24.0	(X)	24.0	(X)

Source: U.S. Census Bureau & Nutter Associates

Table 12 describes the occupational, industry and class of worker characteristics of Ellendale. Service occupations, farming, fishing and forestry, construction, extraction, and maintenance occupations are more dominant in Ellendale than in Sussex County or the State as a whole. Wholesale trade, transportation and warehousing, and Information are the industrial classifications significantly more dominant in the Town than in the County or State. Manufacturing represents almost 11% of Ellendale's economy. Retail trade is noticeably very low in Ellendale. Self-employed workers in own not incorporated business show a remarkably high 83% of all workers.

Table 12
The 2004 Greater Ellendale Comprehensive Plan
Census 2000 Selected Economic Characteristics
Occupation, Industry and Class of Worker
Town of Ellendale
In Comparison with Sussex County and the State of Delaware

Subject	Town of Ellendale	Sussex County	State of Delaware
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	Number	Percent	Number	Percent	Number	Percent
Employed civilian population 16 years and over	169	100.0	69,596	100.0	376,811	100.0
OCCUPATION						
Management, professional, and related occupations	28	16.6	18,952	27.2	132,858	35.3
Service occupations	38	22.5	11,644	16.7	54,912	14.6
Sales and office occupations	46	27.2	17,599	25.3	104,059	27.6
Farming, fishing, and forestry occupations	4	2.4	879	1.3	1,926	0.5
Construction, extraction, and maintenance occupations	26	15.4	8,940	12.8	35,950	9.5
Production, transportation, and material moving occupations	27	16.0	11,582	16.6	47,106	12.5
INDUSTRY						
Agriculture, forestry, fishing and hunting, and mining			1,877	2.7	4,042	1.1
Construction	7	4.1	7,698	11.1	27,866	7.4
Manufacturing	19	11.2	9,780	14.1	49,720	13.2
Wholesale trade	34	20.1	2,140	3.1	10,384	2.8
Retail trade	3	1.8	10,422	15.0	43,578	11.6
Transportation and warehousing, and utilities	33	19.5	2,949	4.2	18,002	4.8
Information	7	4.1	1,134	1.6	7,155	1.9
Finance, insurance, real estate, and rental and leasing	3	1.8	4,115	5.9	43,787	11.6
Professional, scientific, management, administrative, and waste management services	2	1.2	3,863	5.6	34,885	9.3
Educational, health and social services	0	0.0	12,701	18.2	73,056	19.4
Arts, entertainment, recreation, accommodation and food services	37	21.9	6,311	9.1	28,979	7.7
Other services (except public administration)	12	7.1	2,982	4.3	15,752	4.2
Public administration	6	3.6	3,624	5.2	19,605	5.2
CLASS OF WORKER	6	3.6				
Private wage and salary workers			53,845	77.4	305,421	81.1
Government workers			10,026	14.4	52,043	13.8
Self-employed workers in own not incorporated business	140	82.8	5,583	8.0	18,686	5.0
Unpaid family workers	17	10.1	142	0.2	661	0.2

Source: U.S. Census Bureau & Nutter Associates

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Table 13 describes income characteristics. The median household income in the town is \$37,083, which is significantly lower than the County and State. Males have a median income of \$21,875 versus \$17,614 for females. The per capita income for the town is \$14,831, much lower than the County and state figures.

Table 13
The 2004 Greater Ellendale Comprehensive Plan
Census 2000 Selected Economic Characteristics
Household and Family Income
Town of Ellendale
In Comparison with Sussex County and the State of Delaware

Subject	Town of Ellendale		Sussex County		State of Delaware	
	Number	Percent	Number	Percent	Number	Percent
INCOME IN 1999						
Households	113	100.0	62,582	100.0	298,755	100.0
Less than \$10,000	18	15.9	5,457	8.7	21,125	7.1
\$10,000 to \$14,999	0	0.0	4,387	7.0	15,284	5.1
\$15,000 to \$24,999	24	21.2	8,665	13.8	33,898	11.3
\$25,000 to \$34,999	12	10.6	9,370	15.0	36,361	12.2
\$35,000 to \$49,999	33	29.2	11,671	18.6	50,582	16.9
\$50,000 to \$74,999	20	17.7	12,752	20.4	63,663	21.3
\$75,000 to \$99,999	5	4.4	5,027	8.0	35,968	12.0
\$100,000 to \$149,999	1	0.9	3,434	5.5	28,145	9.4
\$150,000 to \$199,999	0	0.0	825	1.3	7,549	2.5
\$200,000 or more	0	0.0	994	1.6	6,180	2.1
Median household income (dollars)	37,083	(X)	39,208	(X)	47,381	(X)
With earnings	86	76.1	46,174	73.8	242,762	81.3
Mean earnings (dollars)	36,897	(X)	47,744	(X)	59,142	(X)
With Social Security income	48	42.5	22,503	36.0	80,457	26.9
Mean Social Security income (dollars)	11,004	(X)	11,785	(X)	11,997	(X)
With Supplemental Security Income	8	7.1	2,472	4.0	10,519	3.5
Mean Supplemental Security Income (dollars)	5,888	(X)	6,723	(X)	6,499	(X)
With public assistance	0	0.0	2,024	3.2	8,047	2.7

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Subject	Town of Ellendale		Sussex County		State of Delaware	
	Number	Percent	Number	Percent	Number	Percent
income						
Mean public assistance income (dollars)	(X)	(X)	2,605	(X)	2,516	(X)
With retirement income	32	28.3	16,748	26.8	62,827	21.0
Mean retirement income (dollars)	11,522	(X)	18,134	(X)	17,871	(X)
Families			44,090	100.0	205,775	100.0
Less than \$10,000	83	100.0	2,241	5.1	8,659	4.2
\$10,000 to \$14,999	0	0.0	1,858	4.2	6,430	3.1
\$15,000 to \$24,999	0	0.0	5,238	11.9	18,583	9.0
\$25,000 to \$34,999	21	25.3	6,590	14.9	23,016	11.2
\$35,000 to \$49,999	12	14.5	9,087	20.6	34,169	16.6
\$50,000 to \$74,999	24	28.9	10,546	23.9	49,324	24.0
\$75,000 to \$99,999	20	24.1	4,117	9.3	30,047	14.6
\$100,000 to \$149,999	5	6.0	2,945	6.7	23,864	11.6
\$150,000 to \$199,999	1	1.2	684	1.6	6,554	3.2
\$200,000 or more	0	0.0	784	1.8	5,129	2.5
Median family income (dollars)	166	(X)	45,203	(X)	55,257	(X)
Per capita income (dollars)	14,831	(X)	20,328	(X)	23,305	(X)
<i>Median earnings (dollars):</i>						
Male full-time, year-round workers	21,875	(X)	30,811	(X)	38,961	(X)
Female full-time, year-round workers	17,614	(X)	23,625	(X)	29,544	(X)

Source: U.S. Census Bureau & Nutter Associates

Table 14 presents Census 2000 data pertaining to poverty in the Town of Ellendale, Sussex County and the State of Delaware. The percentages of families and individuals living below the poverty line in Ellendale is two to three times higher than in the County or State. This reality indicates a need for continuing government subsidy to help alleviate poverty.

Table 14
The 2004 Greater Ellendale Comprehensive Plan
 Census 2000 Selected Economic Characteristics
 Poverty Status

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Town of Ellendale In Comparison with Sussex County and the State of Delaware

Subject	Town of Ellendale		Sussex County		State of Delaware	
	Number	Percent	Number	Percent	Number	Percent
POVERTY STATUS IN 1999 (below poverty level)						
Families	189	(X)	3,403	(X)	13,306	(X)
Percent below poverty level	(X)	18.7	(X)	7.7	(X)	6.5
With related children under 18 years	189	(X)	2,396	(X)	10,403	(X)
Percent below poverty level	(X)	30.4	(X)	12.5	(X)	9.9
With related children under 5 years	151	(X)	1,344	(X)	5,419	(X)
Percent below poverty level	(X)	50.7	(X)	18.8	(X)	13.2
Families with female householder, no husband present	162	(X)	1,651	(X)	7,671	(X)
Percent below poverty level	(X)	35.5	(X)	25.1	(X)	20.4
With related children under 18 years	162	(X)	1,498	(X)	6,950	(X)
Percent below poverty level	(X)	44.1	(X)	31.1	(X)	26.3
With related children	124	(X)	725	(X)	3,413	(X)

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Subject	Town of Ellendale		Sussex County		State of Delaware	
	Number	Percent	Number	Percent	Number	Percent
under 5 years						
Percent						
below poverty level	(X)	63.6	(X)	44.2	(X)	37.1
Individuals	47	(X)	16,108	(X)	69,901	(X)
Percent below poverty level	(X)	15.3	(X)	10.5	(X)	9.2
18 years and over	27	(X)	10,835	(X)	46,496	(X)
Percent below poverty level	(X)	11.0	(X)	9.1	(X)	8.2
65 years and over	12	(X)	2,330	(X)	7,633	(X)
Percent below poverty level	(X)	22.2	(X)	8.4	(X)	7.9
Related children under 18 years	20	(X)	5,131	(X)	22,572	(X)
Percent below poverty level	(X)	32.3	(X)	15.0	(X)	11.9
Related children 5 to 17 years	(X)	32.3	3,293	(X)	15,276	(X)
Percent below poverty level	19	(X)	(X)	12.9	(X)	10.9
Unrelated individuals 15 years and over	(X)	37.3	5,223	(X)	25,725	(X)

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Subject	Town of Ellendale		Sussex County		State of Delaware	
	Number	Percent	Number	Percent	Number	Percent
Percent below poverty level	15	(X)	(X)	20.2	(X)	19.3

Source: U.S. Census Bureau & Nutter Associates

☐ Housing Stock

Table 15 portrays the composition of Ellendale's housing stock in the Year 2000:

Table 15
The 2004 Greater Ellendale Comprehensive Plan
Town of Ellendale
Composition of Housing Stock

Subject	Number	Percent
Occupied Housing Units	104	100.0
UNITS IN STRUCTURE		
1-unit, detached	89	85.6
1-unit, attached	0	0.0
2 units	2	1.9
3 or 4 units	4	3.8
5 to 9 units	0	0.0
10 to 19 units	0	0.0
20 or more units	0	0.0
Mobile home	9	8.7
Boat, RV, van, etc.	0	0.0
YEAR STRUCTURE BUILT		
1999 to March 2000	0	0.0
1995 to 1998	6	5.8
1990 to 1994	5	4.8
1980 to 1989	7	6.7

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Subject	Number	Percent
1970 to 1979	14	13.5
1960 to 1969	5	4.8
1940 to 1959	30	28.8
1939 or earlier	37	35.6
ROOMS		
1 room	0	0.0
2 rooms	0	0.0
3 rooms	3	2.9
4 rooms	19	18.3
5 rooms	14	13.5
6 rooms	25	24.0
7 rooms	17	16.3
8 rooms	22	21.2
9 or more rooms	4	3.8
Median (rooms)	6.1	(X)
YEAR HOUSEHOLDER MOVED INTO UNIT		
1999 to March 2000	15	14.4
1995 to 1998	22	21.2
1990 to 1994	7	6.7
1980 to 1989	17	16.3
1970 to 1979	23	22.1
1969 or earlier	20	19.2
VEHICLES AVAILABLE		
None	6	5.8
1	30	28.8
2	34	32.7
3 or more	34	32.7
HOUSE HEATING FUEL		

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Subject	Number	Percent
Utility gas	3	2.9
Bottled, tank, or LP gas	19	18.3
Electricity	30	28.8
Fuel oil, kerosene, etc.	52	50.0
Coal or coke	0	0.0
Wood	0	0.0
Solar energy	0	0.0
Other fuel	0	0.0
No fuel used	0	0.0
SELECTED CHARACTERISTICS		
Lacking complete plumbing facilities	0	0.0
Lacking complete kitchen facilities	0	0.0
No telephone service	0	0.0
OCCUPANTS PER ROOM		
Occupied housing units	104	100.0
1.00 or less	104	100.0
1.01 to 1.50	0	0.0
1.51 or more	0	0.0
Specified owner-occupied units	71	100.0
VALUE		
Less than \$50,000	6	8.5
\$50,000 to \$99,999	60	84.5
\$100,000 to \$149,999	3	4.2
\$150,000 to \$199,999	2	2.8
\$200,000 to \$299,999	0	0.0
\$300,000 to \$499,999	0	0.0
\$500,000 to \$999,999	0	0.0
\$1,000,000 or more	0	0.0

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Subject	Number	Percent
Median (dollars)	75,500	(X)
MORTGAGE STATUS AND SELECTED MONTHLY OWNER COSTS		
With a mortgage	34	47.9
Less than \$300	0	0.0
\$300 to \$499	6	8.5
\$500 to \$699	13	18.3
\$700 to \$999	11	15.5
\$1,000 to \$1,499	2	2.8
\$1,500 to \$1,999	0	0.0
\$2,000 or more	2	2.8
Median (dollars)	675	(X)
Not mortgaged	37	52.1
Median (dollars)	215	(X)
SELECTED MONTHLY OWNER COSTS AS A PERCENTAGE OF HOUSEHOLD INCOME IN 1999		
Less than 15 percent	33	46.5
15 to 19 percent	7	9.9
20 to 24 percent	11	15.5
25 to 29 percent	6	8.5
30 to 34 percent	4	5.6
35 percent or more	10	14.1
Not computed	0	0.0
Specified renter-occupied units	22	100.0
GROSS RENT		
Less than \$200	0	0.0
\$200 to \$299	0	0.0
\$300 to \$499	11	50.0
\$500 to \$749	9	40.9

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Subject	Number	Percent
\$750 to \$999	0	0.0
\$1,000 to \$1,499	0	0.0
\$1,500 or more	0	0.0
No cash rent	2	9.1
Median (dollars)	492	(X)
GROSS RENT AS A PERCENTAGE OF HOUSEHOLD INCOME IN 1999		
Less than 15 percent	3	13.6
15 to 19 percent	5	22.7
20 to 24 percent	0	0.0
25 to 29 percent	3	13.6
30 to 34 percent	4	18.2
35 percent or more	5	22.7
Not computed	2	9.1

Source: U.S. Census Bureau & Nutter Associates

The Year 2000 population in the larger area comprising Zip Code Area 19941, which east and west from the Town halfway to Greenwood or Milton, is portrayed in Table 14 below:

Table 16 presents a profile of occupancy, tenure and vacancy status in the Town of Ellendale.

Table 16
The 2004 Greater Ellendale Comprehensive Plan
Housing Occupancy & Tenure in the Town of Ellendale in 2000

HOUSING OCCUPANCY		
Total housing units	128	100.0
Occupied housing units	113	88.3
Vacant housing units	15	11.7
For seasonal, recreational, or occasional use	1	0.8
Homeowner vacancy rate (percent)	3.3	(X)

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Rental vacancy rate (percent)	7.1	(X)
HOUSING TENURE		
Occupied housing units	113	100.0
Owner-occupied housing units	87	77.0
Renter-occupied housing units	26	23.0
Average household size of owner-occupied unit	2.64	(X)
Average household size of renter-occupied unit	3.46	(X)

Table 17 presents business data for Zip Code Area 19941 drawn from the US Census Bureau's County Business Patterns reports from 1998 through 2001. It illustrates stable-to-moderate growth in the number of business establishments, 1st quarter and annual payroll and number of employees. It also illustrates that a majority of businesses are small, employing less than 10 employees, and that this small business characteristic is increasing.

Table 17
The 2004 Greater Ellendale Comprehensive Plan
Zip Code Area 19941
2003 Estimated Employment by Occupation in Ellendale's Zip Code Area 19941
Total Businesses, Employees and Occupational Breakdown




Businesses & Employees By Industry	Total Employees		Total Businesses		Businesses with 20+ Employees	
Agriculture/Forestry/Fishery	0	0.0%	0	0.0%	0	0.0%
Mining	0	0.0%	0	0.0%	0	0.0%
Construction	1	0.6%	1	3.4%	0	0.0%
Manufacturing	0	0.0%	0	0.0%	0	0.0%
Transportation/Utilities	4	2.5%	1	3.4%	0	0.0%
Wholesale Trade	2	1.3%	1	3.4%	0	0.0%
Retail Trade	27	17.2%	5	17.2%	0	0.0%
Finance/Insurance/Real Services	0	0.0%	0	0.0%	0	0.0%
Government	105	66.9%	19	65.5%	1	#####
Nonclassified	18	11.5%	2	6.9%	0	0.0%
	0	0.0%	0	0.0%	0	0.0%

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Total Businesses	29
Total Employees	157
Average Employees Per Firm	5.4

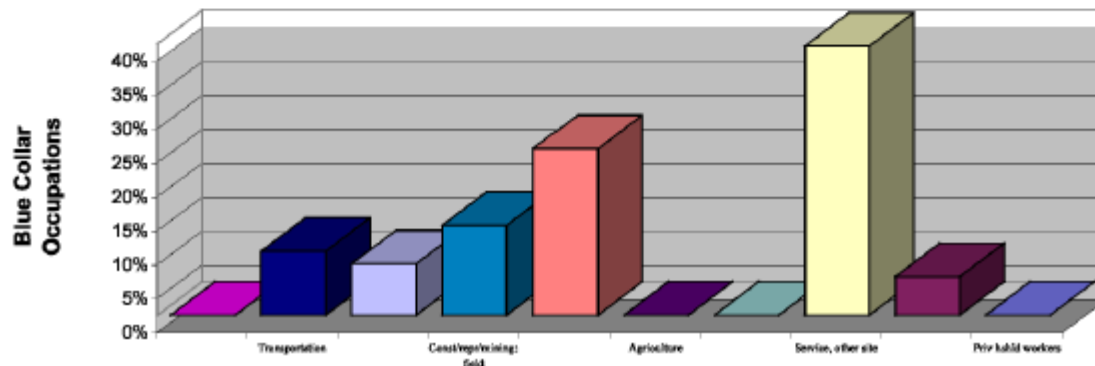
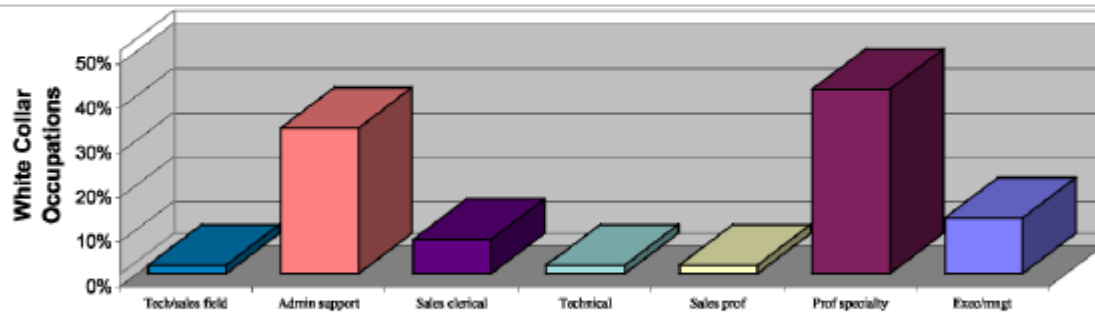
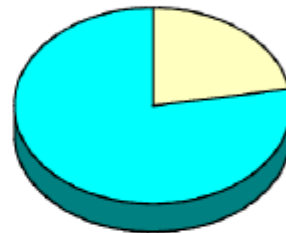
White Collar Occupations	104	66.2%
Executive/Management	13	12.5%
Professional Specialty	43	41.3%
Technical	2	1.9%
Sales Professional	2	1.9%
Sales Clerical	8	7.7%
Administrative Support	34	32.7%
Technical/Sales Field	2	1.9%

Blue Collar Occupations	53	33.8%
Private Household Workers	0	0.0%
Protective Services	3	5.7%
Service, Other Site	21	39.6%
Service, Other Field	0	0.0%
Agriculture	0	0.0%
Crafts/Repair: Site	13	24.5%
Construc/Repair/Mining: Field	7	13.2%
Machine Operators	4	7.5%
Transportation	5	9.4%
Laborers	0	0.0%

Site-Based Employment		148
	Exec/Mngt/Prof	58 39.2%
	Tech/Sales/Admin	44 29.7%
	Blue Collar	46 31.1%



Field-Based Employment		9
	Tech/Sales/Admin	2 22.2%
	Blue Collar	7 77.8%



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Source: U.S. Census Bureau, County Business Pattern Reports by Zip Code Area and Scan/US

The job count of 157 for such a large area appears lower than desirable, emphasizing the theme that in future development Ellendale should strive to increase jobs.

Because both Milford, as Ellendale's banking and educational center, and Georgetown, as its government center, both with extensive commercial and industrial facilities used by Ellendale residents, 1997 Economic Census data is presented below for these two centers.

Table 18

Milford, DE *

Table 1. Statistics by Economic Sector

1997 Population: 6,592

NAICS Industry Code	Industry Description	Number of Establishments	Number of Employees	Annual Payroll (\$1,000)	Shpmts/Sales/Recpt s (\$1,000)
---------------------------	-------------------------	-----------------------------	------------------------	--------------------------------	--------------------------------------

NAICS INDUSTRIES

31-33	Manufacturing	19	2,246	53,231	336,835
42	Wholesale trade	19	129	2,920	43,241
44-45	Retail trade	78	1,077	16,769	203,149
53	Real estate & rental & leasing	12	32	492	36,900
54	Professional, scientific, & technical services	11	81	2,018	5,973
56	Administrative & support & waste management & remediation serv.	9	28	359	1,526
62	Health care & social assistance	43	454	13,497	29,525
71	Arts, entertainment, & recreation	5	38	424	959

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NAICS Industry Code	Industry Description	Number of Establishments	Number of Employees	Annual Payroll (\$1,000)	Shpmts/Sales/Recpts (\$1,000)
72	Accommodation & foodservices	26	366	3,448	12,017
81	Other services (except public administration)	35	141	1,993	7,646

MERCHANT WHOLESALERS

42	Wholesale trade	13	c	D	D
----	-----------------	----	---	---	---

MANUFACTURERS' SALES BRANCHES AND SALES OFFICES

42	Wholesale trade	3	b	D	D
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AGENTS, BROKERS, AND COMMISSION MERCHANTS

42	Wholesale trade	3	a	D	D
----	-----------------	---	---	---	---

Source: U.S. Bureau of the Census, 1997 Economic Census

Table 19
Georgetown, DE
Table 1. Statistics by Economic Sector
1997 Population: 4,137

NAICS Industry Code	Industry Description	Number of Establishments	Number of Employees	Annual Payroll (\$1,000)	Shpmts/Sales/Recpts (\$1,000)
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NAICS INDUSTRIES

42	Wholesale trade	4	b	D	D
44-45	Retail trade	48	359	6,293	68,418
53	Real estate & rental & leasing	12	b	D	D
54	Professional, scientific, & technical	37	243	9,042	17,007

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NAICS Industry Code	Industry Description	Number of Establishments	Number of Employees	Annual Payroll (\$1,000)	Shpmts/Sales/Recpt s (\$1,000)
	services				
56	Administrative & support & waste management & remediation serv.	11	310	6,806	12,121
62	Health care & social assistance	21	242	5,222	12,014
72	Accommodation & foodservices	14	240	2,009	8,252
81	Other services (except public administration)	11	31	523	2,076

MERCHANT WHOLESALERS

42	Wholesale trade	3	b	D	D
----	-----------------	---	---	---	---

MANUFACTURERS' SALES BRANCHES AND SALES OFFICES

42	Wholesale trade	1	a	D	D
----	-----------------	---	---	---	---

Assessed Value

Sussex County Data Processing reports that the total amount of assessed value in the Town of Ellendale for the most current year was \$1,291,625.

C. Supporting Plans and Studies

The Supporting Plans and Studies described below contain information and ideas important to the Comprehensive Plan:

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The Sussex County Ellendale Sewer District

A meeting was held with the Sussex County Engineering Department on May 6, 2004 in order to discuss the status of the Ellendale Sanitary Sewer District (ELSSD), for which construction is nearly complete. At that time, copies of the three basic documents describing the new District were provided to the Comprehensive Planning Team:

- (1) Ellendale Sanitary Sewer District – Facilities Plan and Environmental Assessment, July 1, 1999, prepared by Whitman, Requardt and Associates.
- (2) The Ellendale Sanitary Sewer District Collection and Conveyance Design Criteria and Wastewater Flows Technical Memorandum, prepared by Whitman, Requardt & Associates, dated March 4, 2003, and
- (3) Agreement – Georgetown/Ellendale Sanitary Sewer District, dated May 25, 2000.

The following describes the important factors associated with the design and operation of the Sewer System for Ellendale:

- (1) The creation of the Ellendale Sanitary Sewer System by Sussex County has been a forthright response to deteriorated public health conditions in the Greater Ellendale community. It has been designed as a measure to prevent further contamination of wells by defective septic systems. It was designed as a moderately scaled system based on EDU's sized at 240 gallons per day.
- (2) The service area of the District is described on the map entitled The Sussex County Ellendale Sanitary Sewer District. It includes 900 acres of land. The District includes the Town of Ellendale and its surrounding area to the east (New Market), north, west (to U.S. Route 113) and south (New Hope).
- (3) Construction of the system is now complete and area plumbing firms are making house connections. The pipes were sized moderately by the County. The District was designed to serve all uses within it, plus 1 section of the Residential – General County zoning district to the north of the area.
- (4) Treatment is provided by the Town of Georgetown Wastewater Treatment Plant 7 miles to the south, based on a written agreement between Sussex County and the Town of Georgetown. The agreement is for a capacity of 110,000 gallons per day at the present but can be expanded to 165,000 gallons per day. Additional capacity increases are possible through building a Wastewater Treatment Plant within the District, or through Spray Irrigation on acquired agricultural lands.
- (5) Sewer planning is based on EDU's, or Equivalent Dwelling Units. An EDU is defined as the consumption of 225 gallons per day. This is somewhat lower than the commonly used standard of 240 gallons or even 300 gallons per day.
- (6) In its Sewer District planning, Sussex County assumed that new development in the Greater Ellendale Area would occur at an average density of 4 dwelling units per acre. It was assumed that 10% of the land would be vacant and that 20% would be used for roads.

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- (7) Future 40-year EDU's (Equivalent Dwelling Units) were projected by escalating the number of initial year dwelling units at a straight-line growth rate of 1.5% per year for a period of forty years, a 60% increase over forty years. There were 458 initial dwelling units counted in the service area in the Year 2000, including 146 in the Town, 82 in New Market Village and 230 in the remaining unincorporated areas of the District. Based on the 1.5% annual growth rate, the 40-year EDU count was estimated at 813 EDU's, including 265 in the Town, 130 in New Market Village and 418 in the remaining unincorporated area.
- (8) Build-out EDU's were then calculated for the service area. Total Build-out EDU's were estimated to be 4,275, five times the 40-Year EDU's, in the entire district. This includes 540 EDU's (including 136 Commercial EDU's) in the Town of Ellendale, 130 EDU's (not including Commercial EDU's) in New Market Village and 3,605 EDU's (including 462 Commercial EDU's) in the remaining unincorporated area of the District.
- (9) For Commercial EDU's, average daily flows of 1,500 gallons per day per acre of commercial land use, or 6.67 EDU's per acre, were assumed.
- (10) Applying the 225 gallons per day per EDU standard to the Year 2000 EDU's, 40-Year EDU's and Build-out EDU's results in the following levels of demand: 103,050 gallons per day for the Year 2000 EDU's, 182,925 gallons per day for the 40-Year EDU's and 961,875 gallons per day for the Build-out EDU's. Clearly, the current agreement with Georgetown cannot handle the full amount of 40-Year EDU's. In no way could it handle the Build-out EDU's.
- (11) Based on a growth rate of 1.5% per year, the County estimates that the initial capacity of 110,000 gallons per day will be exceeded by the Year 2005 and the higher 165,000 gallons per day capacity by 2032.
- (12) Based on a higher growth rate of 3.0% per year, the County projects that the 165,000 gallons per day capacity would be exceeded by 2016.
- (13) The Collection and Conveyance Memorandum states that: "Providing service for any significant area outside the ELSSD is impractical due to the size and cost of the facilities that would be required. Only a limited amount of excess capacity is available in the collection and conveyance system for flows from outside the sanitary sewer district".
- (14) In order to provide service for the Build-out level of development, the following upgrades would be needed:
 - a. Acquisition and design of a future wastewater treatment site.
 - b. Dedication of Pump Station #90 completely to the New Hope area along South Old State Road.
 - c. Construction of additional force mains.
 - d. Pump Station #91 would become the primary pump station for the entire district and would convey all flows to Georgetown.
- (15) The Collection and Conveyance Memorandum concludes by stating that: "Prior to the treatment capacity available under the terms of the Georgetown Agreement being exceeded, an alternate treatment location will have to be determined. Accepting either flows from outside the sanitary sewer district or allowing

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significant development to occur within the sanitary sewer district does not appear to be possible until additional treatment capacity is obtained. Therefore, it may be beneficial to target and purchase land for this area in the immediate future, to actively plan for the future of the ELSSD and the surrounding area.”

Sussex County’s Newly Initiated North Coastal Area Sewer Study

In May, the Sussex County Council initiated a major North Coastal Area Sewer Study. Whitman, Requardt and Associates were selected as the engineering firm to conduct the study over an 18-month period. The Study Area includes the area from Milford, Ellendale and Georgetown on the west to the beachfront communities on the east and from Milford in the north to Millsboro in the south. Its purpose is to form a plan to sewer the entire area by tying together existing systems and serving previously Unserved communities. The Plan is intended to take Sussex County to the year 2025 in its infrastructure development. The County has indicated that it is set to spend \$115 million on new sewer.

Delaware Water Study for Unserved and Underserved Communities, prepared for the Delaware Division of Public Health Office of Drinking Water by Whitman, Requardt and Associates, LLP, January 1998.

In 1998, the Office of Drinking Water of the Delaware Division of Public Health commissioned Whitman, Requardt and Associates of Baltimore to prepare a Delaware Water Study for Unserved and Underserved Communities, of which Ellendale was one. An area comprising 392 potential service connections (households and non-residential establishments) was studied, including both incorporated and unincorporated areas.

Several locations in and around Ellendale had water samples in excess of the nitrate MCL. Other SMCL violations such as iron and pH also appeared as potential problems.

The question of a future water system for the Ellendale area had been discussed for several years. The Delaware Water Study for Unserved and Underserved Communities contained the following recommendations for the Ellendale area:

- ☐ recommended provision of a small community water treatment and distribution system;
- ☐ contained a 1998 cost estimate of \$2.03 M for the system;
- ☐ recommended that a system for Ellendale include one deep well in one of the Chesapeake Group Aquifers and one shallow well in the unconfined aquifer for blending to mitigate nitrate problems;
- ☐ stated that many of the nitrate problems in the area were due to failing septic systems above the shallow aquifer and might be largely corrected by the construction of sanitary sewer system now being completed for operation;

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- ❑ recommended that system facilities include one elevated storage tank capable of providing equalization and a residential fire flow of 500 gpm for 1 hour;
- ❑ Recommended water treatment for Iron and pH;
- ❑ described a service area similar to the service area for the new Sussex County Ellendale/New Market Sanitary Sewer District, although the latter extends farther east between Road 231 and the Sowbridge Branch of Cedar Creek, to include the New Market area.

The Office of Drinking Water also provided to the Planning Team a copy of the "Readiness to Proceed List - 2002 Federal Allocation", dated April 2003, which ranked as the Ellendale Water Project the number 2 priority in the state (after Ocean View, which is now under construction) with a score of 420, and a population to be served estimated at 472, an estimated project cost of \$2,532,000, and the Ellendale Civic Association as the system applicant.

After many years of debate about the need for a sewer system in Ellendale, Sussex County installed a new Ellendale-New Market Sanitary Sewer District during 2000-2004. The new system includes the Town of Ellendale, New Market village and trailer park 2 miles east of the Town, the area along SR 16 west to the SR 16/US 113 intersection and 1 parcel beyond, and south along South Old State Road (SR 213) to New Hope village. The system cost approximately \$11,000,000 and included funding from the US Department of Agriculture, the State of Delaware, the US Environmental Protection Agency and Sussex County. The Sussex County Council also requested and received CDBG funds to assist low/moderate income households with hook up costs. Hook ups are now being completed.

Over the past year, concerned citizens and agencies established an Ellendale Working Group to advocate for a public water supply system to serve an area comparable to that served by the new Sussex County Ellendale-New Market Sanitary Sewer System completed in 2004. The Town and Planning team met on several occasions with the Ellendale Working group. In February 2004, the Ellendale Town Council passed a resolution to apply for state and federal funds to conduct a public water system feasibility analysis as part of the Comprehensive Plan. The analysis was conducted by Nutter Associates and George, Miles and Buhr. In addition to the planning and engineering issues to be addressed, it addressed questions of funding and affordability and voluntary versus mandatory hook-up to any new system. These were issues raised by several citizens at the December 16, 2003 community meeting.

Investigation of a Possible Cancer Cluster in Ellendale, Delaware – Leroy Hathcock, PhD., State Epidemiologist, Delaware Division of Public Health.

Based on citizen concerns that were expressed at the December 16th Town meeting, the Comprehensive Plan Team requested that the state investigate the possibility of a cancer cluster in Ellendale. The State Epidemiologist investigated the matter and responded on

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September 20, 2004 with a letter report and finding that cancer cases in Ellendale do not appear to represent a cancer cluster.

Greater Ellendale Water System Feasibility Analysis

1.1 Introduction

At the request of the Town of Ellendale Town Council, Nutter Associates and George, Miles and Buhr (GMB) are studying the feasibility of a future public water supply, treatment, and storage system for the Town of Ellendale and portions of the surrounding unincorporated community. The study team is working closely with the Ellendale Working Group, a consortium of community groups and agencies advocating a public water system for Ellendale, as well as the State and County. The purpose of this draft Greater Ellendale Water System Feasibility Analysis is to present the initial findings of the study for review and comment.

The Town of Ellendale and the Greater Ellendale Area are located along Delaware Route 16 (Main Street and Beach Highway), east of US 113, north of Georgetown and south of Milford, in central Sussex County, Delaware. The study area extends for about a 1-mile radius around the center of town, following the boundaries of the newly constructed Sussex County Ellendale and New Market Sanitary Sewer District. The water system study area is outlined on Drawing No. 1.

The reasons that make having a public water system desirable for Ellendale are:

- ❑ Ellendale is located in a swamp region where the water table is high, there is rapid recharge of the underlying unconfined aquifer, nitrates exist in significant quantity in the shallow aquifer, there are numerous areas with hydric soils and existing private wells are shallow. A public water system would enable the community to draw its potable water from the deeper confined aquifer that does not pose significant nitrate problems.
- ❑ Ellendale is beginning to experience new development and this can be expected to grow. A public water system will allow the community to better regulate and design new development in a way that conserves scarce community resources and is environmentally sound in keeping with the Livable Delaware program.
- ❑ A reliable and high-pressure public water system is needed for fire protection services for the future.

This feasibility analysis has been conducted as part of the development of The 2004 Greater Ellendale Comprehensive Plan. The Comprehensive Plan presents a vision of Ellendale, goals and objectives for community development and conservation, policies and recommended action projects. It includes a Framework for Future Land Use diagram, Future Land Use Plans for both the Town and the surrounding community, and a

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Potential Growth and Annexation Map. These documents have been used as the basis for the proposed public water system presented in this study.

1.2 Existing Conditions

The study area consists of approximately 350 residences and 11 businesses/institutions. Most homes and businesses are served by private, individually owned and operated wells. Most of the private residential wells are located within the unconfined aquifer at depths ranging from 40-70 feet. Also located within the unconfined aquifer are fire protection, agricultural, and miscellaneous public wells with depths ranging from 50-110 feet.

The study area also includes the community of New Market, a 107-unit mobile home park located 2 miles east of Ellendale. New Market has its own central water supply system, including two wells. Due to the presence of an existing water system and the great distance from the center of the study area, there is no apparent need to serve New Market and it has not been included in the first phase of the system.

The following tables present a partial inventory of existing wells within the study area as compiled from records obtained from DNREC, DE Public Health Office of Drinking Water and local well drillers.

Domestic

Number (#)	Well Location	Depth (Ft)	Diameter (In)	GPM	Year Drilled
179547	Main St.	60	2	25	2001
47877	Corner of Willow and Railroad Ave.	54	1.5	5	1981
49842	Corner of Main and Prettyman Ave.	42	1.25	4	1981
39523	Corner of Main and Ponder Ave.	65	2	15	1977
49418	State St. Parcel 33	65	2	15	1981
100283	Main St. Parcel 47 Adjacent to Detox	68	2	20	1994
78128	Willow St. Parcel 72 across from CG	55	2	10	1989

Fire Protection

Number (#)	Well Location	Depth (Ft)	Diameter (In)	GPM	Year Drilled
---------------	---------------	---------------	------------------	-----	--------------

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36135	Corner of Main and Ellegood Ave.	75	6	300	1976
-	Corner of Ponder Ave. and Pine St.	75	6	300 +	1980
-	Front of Fire Hall	75	-	300 +	1964

Agricultural

Number (#)	Well Location	Depth (Ft)	Diameter (In)	GPM	Year Drilled
156219	Intersection of Rt. 226 & Rt. 16	90	12	330	1998
157159	Intersection of Rt. 624 & Rt. 224	108	12	375	1998

Miscellaneous Public

Number (#)	Well Location	Depth (Ft)	Diameter (In)	GPM	Year Drilled
78704	New Market #3	175	4	65	1990
-	New Market #2 (back-up)	76	-	-	-
161918	De-lux Dairy Market	220	4	20	1998
172713	Ellendale Post Office	233	4	40	2000
172216	Chosen Generation Day Care Center	50	2	10	2000
185209-W	Philadelphia Pentecostal Church	60	4	20	2002
95988	Exxon	234	4	150	1988

- Indicates unknown data

Note also that there are a few miscellaneous public wells that are drilled to depths of 175-234 feet, where it draws water from the confined minor Miocene aquifer.

In May 2004, the Office of Drinking Water performed a random sampling of tap water from forty dwellings and businesses in the study area. The samples were tested for nitrates, iron, sodium, alkalinity, pH, fluoride, chloride, hardness, nitrite, sulfate, and bacteria. The results of the survey show 20% of the tested wells exceed iron standards, 15% exceed nitrate standards, and 5% exceed bacteria standards. A summary of the survey results is shown in the following table.

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Parameter		Raw Water Quality (mg/l)	Drinking Water Standard (mg/l)
Nitrates		6.3	10 (P)
Iron		1.56	0.3 (S)
Sodium		19.925	20 (CCL)
Alkalinity		14.65	-
Fluoride		< 0.1	4.0 (P)/2.0 (S)
Chloride		20.0	250 (S)
Hardness		16.7	-
Nitrite		< 0.1	1 (P)
Sulfate		15.5	250 (S)
Bacteria		Present in 2 samples	Absent (P)
pH		5.6	6.5-8.5 (S)

P-Primary Standard S-Secondary Standard CCL – Contaminant Candidate List

The complete survey results are provided in a separate appendix.

Additional water quality data was obtained from Office of Drinking Water records for miscellaneous public wells in the area. This data shows lower average levels of nitrates, iron, and sodium and a rise in pH levels as compared with earlier sampling results from May 2004. Even though the average iron level for these miscellaneous public wells tested lower than the sampled survey wells, it still proved to be above the recommended drinking water standard of 0.3 mg/l. This data is also provided in the report appendix.

1.3 Water System Requirements

1.3.1 Domestic Water Demand

A public water system must provide for projected peak water demand from both existing and proposed development. In addition to the existing 350 residential dwelling units and 11 businesses/institutions, future land use and development must also be evaluated. Future development has been estimated at a growth rate of 15 dwelling units per year over a 20-year time period, plus an addition of up to 100,000 square feet of non-residential business, service, institutional or commercial space. Usage is estimated in gallons per day (gpd). Projected water consumption, based on average daily demand, is estimated to be:

Existing Development

350 single-family dwellings \times 300 gpd per dwelling = 105,000 gpd

10,000 ft² of non-residential area at 1 EDU per 1,000 ft²:

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$$10 \text{ equivalent dwelling units} \times 300 \text{ gpd per unit} = 3,000 \text{ gpd}$$

25,000 ft² of non-residential area at 1 EDU per 3,000 ft²:

$$8 \text{ equivalent dwelling units} \times 300 \text{ gpd per unit} = 2,400 \text{ gpd}$$

Proposed Development

$$300 \text{ single-family dwellings} \times 300 \text{ gpd per dwelling} = 90,000 \text{ gpd}$$

100,000 ft² of non-residential area at 1 EDU per 1,000 ft²:

$$100 \text{ equivalent dwelling units} \times 300 \text{ gpd per unit} = 30,000 \text{ gpd}$$

$$\text{Total in gallons per day} = \frac{230,400 \text{ gpd}}$$

$$\text{Total in gallons per minute} = 160 \text{ gpm}$$

The maximum daily demand is the maximum total amount of water used during any 24-hour period in a three-year period. A peak factor of 1.5 times average daily demand has been used. This factor is recommended by the American Water Works Association (M31 “Distribution System Requirements for Fire Protection”) for areas in which historical data is not available:

Max. Daily Demand in gallons per day:

$$1.5 \times 230,400 \text{ gpd} = 345,600 \text{ gpd}$$

Max. Daily Demand in gallons per minute: 240 gpm

The maximum hourly demand is the maximum total amount of water used in any single hour, of any day, in a three-year period. The maximum hourly demand is estimated at 4 times the average daily demand:

Max. Hourly Demand in gallons per minute: 640 gpm

1.3.2 Fire Flow Requirements

For the proposed building classifications in the study area, the following fire flow requirements, in accordance with the current edition of the Delaware State Fire Prevention Regulations (DSFPR), will apply:

	<u>Rate of Flow</u>	<u>Duration</u>
Single-family residential	500 gpm	1 hour

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Health Care/Business/Education	1,000 gpm	1 hour
Storage/Industrial/Mercantile	1,500 gpm	2 hours

Note: Fire flow requirement table information based on DSFPR Part II Chapter 6 (2003 edition).

The worst-case fire demand is associated with commercial sites. The total volume of water required for fire protection for commercial sites is:

$$1,500 \text{ gpm} \times 120 \text{ minutes} \times 102\% = 183,600 \text{ gallons}$$

The above fire flows must be maintained at a minimum residual pressure requirement of 20 psi.

1.4 Proposed Water System

1.4.1 Well Water Supply

Water supply for the study area shall be provided by a central well system. Two wells are proposed, one of which will serve as the primary production well and the other as a backup well. In an emergency situation where the primary production well becomes inoperable or must be removed from service, a backup well ensures minimal interruption of service. An emergency generator will also be provided for backup power supply at each individual well. The two proposed well locations, based on the ability to efficiently serve the study area, are shown on Drawing No. 2. Alternate sites could also be considered.

The wells and pumps should be sized for a minimum capacity of 200 gpm each. This production rate, in combination with storage, will supply the peak water demand. While the proposed production rate can be easily met within the unconfined aquifer, as confirmed by known fire protection and agricultural well data, high levels of nitrates are prevalent in the unconfined aquifer and are the cause of a major health concern in this study area. One significant reason for recommending a public water system for the Ellendale study area is to draw drinking water from the deeper aquifers and avoid use of water from the shallower unconfined aquifer. Excess nitrates in the water may be harmful to infants less than 6 months of age, causing a condition called methemoglobinemia, or blue baby syndrome, which results in an oxygen deficiency in the blood.

The shallow wells are also more susceptible to contamination by bacteria, as detected in two wells sampled for water quality data by the DE Public Health Office of Drinking Water. In addition, the Ellendale area has been mapped by the Delaware Geological Survey as having a good to excellent recharge potential, as shown on Drawing No. 1.

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This is also cause for concern that other contaminants, potentially even more harmful, could leach into shallow wells.

Accordingly, it is proposed that the primary production well be drilled deep in order to draw from the Minor Miocene aquifer. The Minor Miocene is a confined aquifer ranging in depth from 220 to 290 feet deep. In addition to low nitrate levels, the Minor Miocene aquifer has the advantage over the shallow unconfined aquifer in that very few existing wells in and around the study area utilize this source, thereby reserving the majority of the aquifer capacity for the proposed system.

It will be necessary to drill a test well to the Minor Miocene aquifer, in order to confirm that an adequate production rate can be obtained. The highest producing known well in this aquifer is at the existing Exxon station at US Route 113 and Delaware Route 16, with a production rate of 150 gpm. The test well will also be needed to confirm that the water quality will be suitable for drinking purposes. Based upon the limited data from existing wells, it appears that treatment for iron removal may be needed.

1.4.2 Elevated Storage Tank

An elevated water storage tank should be centrally located to provide optimal water supply and pressure for fire suppression and operating reserves for surrounding areas. A proposed location for the elevated tank is behind the Kent-Sussex Detoxification Center, as shown on Drawing No. 2. Alternate sites could also be considered.

A 250,000 gallon elevated storage tank is proposed, as derived following:

Fire Suppression Storage	183,600 gallons
Operating Reserve	<u>66,400 gallons</u>
	250,000 gallons

The operating reserve of 66,400 gallons, in combination with a 200 gpm primary production well, will produce the required 240 gpm in order to serve the maximum daily demand of the study area. The proposed operating reserve is also adequate to supply the peak hourly demand of 640 gpm for a duration of 1.5 hours.

The height of the tank must be designed to satisfy the following pressure requirements:

Minimum pressure during peak hour	30 psi
Minimum pressure during fire	20 psi

There are several styles of elevated storage tank that could be selected, such as pedestal, hydropillar, composite, or traditional leg-style.

1.4.3 Water Treatment

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Raw water will likely require treatment in order to meet the EPA Drinking Water Standards. Water quality samples from existing wells in the Minor Miocene aquifer show that the raw water meets primary standards, but will require treatment for iron removal and pH adjustment in order to meet secondary standards.

Iron content becomes objectionable above 0.3 mg/l because of its metallic taste and odor and its tendency to discolor laundry, plumbing fixtures, beverages, glasses and dishware. Several treatment options are available for iron removal, including green sand filters, ion exchange, oxidation-filtration, flocculation-sedimentation, activated carbon, reverse osmosis and sequestration. Selection of an iron removal process will depend upon the actual iron concentration, iron form, and pH concentration, according to test well data from the selected well location. Greensand filters are widely used as well as package plants that combine multiple processes.

Disinfection will also be required to protect against pathogenic microorganisms that can cause illnesses such as typhoid fever, dysentery, cholera, and gastroenteritis. Chlorination is the most commonly used means of disinfection. Gas chlorination systems are no longer favored due to concerns for operator safety and have been replaced by solution forms such as sodium hypochlorite. The chlorination system will consist of a solution tank and metering pump. In addition, fluoride addition will be required for the protection of dental health.

1.4.4 Water Distribution System

The proposed water distribution system shall consist of 6, 8 and 10-inch water mains as shown on Drawing No. 2. The system will be equipped with fire hydrants and isolation valves. Individual water services and meters shall be provided for each parcel or building unit.

1.4.5 Cost Estimates

A cost estimate for the proposed water system for Greater Ellendale is shown in the following table. For a phased system, the initial capital cost is estimated at \$8.0 million.

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	Unit Price	Quantity	Unit	Cost
Water Distribution System				
Phase 1 Annexation				
6" Water Main	\$ 50.00	1106	LF	\$ 55,300
8" Water Main	\$ 55.00	15154	LF	\$ 883,470
Fire Hydrants	\$ 3,700.00	33	EA	\$ 120,324
Gate Valves	\$ 550.00	33	EA	\$ 17,886
Services/Meters	\$ 900.00	150	EA	\$ 135,000
Phase 2 Annexation				
8" Water Main	\$ 55.00	10945	LF	\$ 601,975
10" Water Main	\$ 65.00	6187	LF	\$ 402,155
Fire Hydrants	\$ 3,700.00	34	EA	\$ 126,777
Gate Valves	\$ 550.00	34	EA	\$ 18,845
Services/Meters	\$ 900.00	220	EA	\$ 198,000
Town Center				
6" Water Main	\$ 50.00	5599	LF	\$ 279,950
8" Water Main	\$ 55.00	8778	LF	\$ 482,790
10" Water Main	\$ 65.00	4598	LF	\$ 298,870
Fire Hydrants	\$ 3,700.00	38	EA	\$ 140,415
Gate Valves	\$ 550.00	38	EA	\$ 20,873
Services/Meters	\$ 900.00	175	EA	\$ 157,500
Water Supply Wells				
Test Well	\$ 10,000.00	2	LS	\$ 20,000
Production Wells	\$100,000.00	2	LS	\$ 200,000
Water Treatment Facility				
Iron Removal Type	\$500,000.00	1	LS	\$ 500,000
Elevated Water Storage Tank	\$ 2.50	250,000	GAL	\$ 625,000
Subtotal				\$ 5,235,130
Construction Contingency		20%		\$ 1,047,026
Construction Total				\$ 6,282,155
Other Project Costs		25%		\$ 1,570,539
Engineering, Administrative, Legal, Fiscal				
Project Total				\$ 7,852,694

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1.4.6 User Charges

User charges were developed based upon the following assumptions:

Capital cost of initial system - \$ 8.0 million
Proposed Funding:
 50% grant - \$4.0 million
 50% loan – \$4.0 million
Interest rate for loan – 3.0% interest over 20 yrs

Initial number of users – 480
Annual Debt Recovery - \$268,863
Operation and Maintenance Cost – \$96,000
Total Annual Cost - \$364,863
Annual User Charge – \$760 per EDU
Monthly User Charge - \$63 per EDU

If an additional 300 units were included, raising the initial number of users to 780, the Annual User Charge for Debt Recovery would then be estimated at \$345, instead of \$560, resulting in a total User Charge of \$545 annually, or \$45 per month.

1.4.7 Mandatory Connection

The Study Team consulted with public and private agencies that provide funding for or design, finance and operate public water systems. All advise that a viable system requires mandatory hook-up within the designated study area in order to repay debt and attract government financing, as was the case with the sewer system. Ellendale's sewer system received a 58% subsidy through grant funds as a result of high levels of need and low levels of income in the service area. These same conditions apply to a water system. As recommended below, in the next stage of the study, a reconnaissance should be made of available funding resources including both grants and low interest loans.

1.5 Implementation

The following implementation steps are recommended:

1. The draft report should be evaluated by citizens and public and private agencies, including the Ellendale Working Group, Sussex County and the Delaware Office of Drinking Water.
2. A reconnaissance should be made of public and private funding sources including both grants and low-interest loans. Such subsidy may be provided by the following potential sources:

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- a. The State of Delaware Drinking Water State Revolving Fund
 - b. Possible EPA Assistance through The Chesapeake Bay Program
 - c. The Southeast Rural Community Assistance Project, Inc. Loan Fund Program
 - d. USDA/Rural Development's Rural Utilities Service (RUS) Water/Waste Program
 - e. U.S. Department of Housing and Urban Development Community Development Block Grant Funds administered by the Delaware State Housing Authority in cooperation with the Sussex County Division of Housing and community Development
 - f. The State of Delaware DNREC Water Conservation and Well Replacement Loan Program
 - g. Community Reinvestment Act (CRA) Investments by Local and Regional Banks
 - h. Private Foundation Programs Which Match the Needs of Ellendale and the Interests of the Foundations
 - i. Private Sector Developer Equity and Loan Funds or Facility Contributions
 - j. Participation by State of Delaware Regulated Private, Investor-Owned Water Companies
 - k. Participation by an Adjacent Municipality with an Established and Partly Amortized Water Supply Infrastructure, such as the Towns of Milford, Milton, Georgetown or Greenwood.
3. Consideration should be given to forming a public-private partnership between the Town, County, State and a private company. A Request for Proposals (RFP) should be prepared that incorporates the final study and can be distributed to surrounding Towns, the County, the State and private companies.
 4. The Town should consider a policy in which future private developers will be asked to pay the full costs of their connections to a water supply system.
 5. Application will need to be made to the Public Service Commission for a Certificate of Public Convenience and Necessity (CPCN). See Appendix C in appendix materials.
 6. Submittal of Plans and Specifications to the Division of Public Health Office of Drinking Water. See Appendix D in appendix materials.

1.6 Impact of Proposed Development West of US Route 113

A proposed 270-acre development site west of Route 113 and both north and south of Delaware Route 16, if implemented, will have a major impact on the design of an Ellendale water system. A major expansion of the proposed system would be required to accommodate this proposed development.

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In addition to the average daily demand of 230,400 gpd, the following projected water consumption must be included:

$$270 \text{ acres} \times 5 \text{ EDU's per acre} = 1,350 \text{ EDU's}$$

$$1,350 \text{ single-family dwellings} \times 300 \text{ gpd per dwelling} = 405,000 \text{ gpd}$$

100,000 ft² of non-residential space at 1 EDU per 1,000 ft²:

$$100 \text{ equivalent dwelling units} \times 300 \text{ gpd per unit} = 30,000 \text{ gpd}$$

$$\text{Previously Proposed average daily demand} = 230,400 \text{ gpd}$$

$$\text{Total in gallons per day} = \frac{665,400 \text{ gpd}}{\text{-----}}$$

$$\text{Total in gallons per minute} = 462 \text{ gpm}$$

Max. Daily Demand in gallons per day:

$$1.5 \times 665,400 \text{ gpd} = 998,100 \text{ gpd}$$

$$\text{Max. Daily Demand in gallons per minute:} \quad 693 \text{ gpm}$$

This proposed residential development would require adjustment of the system design parameters. The following are two possible modifications to the water storage and well design to possibly accommodate the proposed additional units:

1. The size of the storage tank will increase to 400,000 gallons, requiring a total of three wells at a minimum rate of 283 gpm.
2. The size of the storage tank will increase to 300,000 gallons, requiring a total of four wells at a minimum of 204 gpm.

Not only will the proposed development cause a considerable modification to the water system design parameters, but it will also incur a profound impact on the individual user charges. With a private developer capital contribution for the additional facilities needed for such a proposed development, the user charges will significantly decrease as based on the following assumptions:

Capital cost of initial system - \$ 8.0 million

Proposed Funding:

50% grant - \$4.0 million

50% loan – \$4.0 million

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Interest rate for loan – 3.0% interest over 20 yrs

Number of users – (initial + proposed) 480 + 1350 = 1,830

Annual Debt Recovery - \$268,863

User Charge – Debt Recovery – \$150

Such subsidy and growth will only decrease the overall cost for users. Further study of the entire impact generated by this proposed development is required.

Addendum No. 1 to Greater Ellendale Water System Feasibility Analysis September 28, 2004 - Consideration of Regional Water Supply Infrastructure

The Town of Ellendale is centrally located between four neighboring towns with municipal water systems – Millsboro, Milton, Georgetown and Greenwood. A regional water supply system has been suggested as a possible alternative for the supply of affordable drinking water for the residents of Ellendale.

Indeed, the regional approach was successfully implemented for sewer service for the greater Ellendale area. Using an interconnecting pipeline between Ellendale and Georgetown, raw wastewater is pumped to Georgetown for treatment and ultimate disposal.

A cost estimate was developed for a regional water supply from Milton, and also Milford, both of which are approximately 6 miles from Ellendale. The cost of a transmission main alone is estimated at approximately \$2 million. This cost would not be offset by the elimination of other components of the system. The elevated storage tank would still be required as a pressure source and to satisfy the volume requirements for fire service and daily demands of greater Ellendale. The need for construction of additional wells and water treatment capacity would be dependant upon existing and future needs within the existing service area (the analysis of which is beyond the scope of this study). The backup supply well could likely be eliminated. The total cost of a central water system with interconnection to Milton (or Milford) is estimated at \$10.7 million, which is greater than the cost for a stand-alone system.

1974 Sussex County, Delaware Soil Survey, prepared by the United States Department of Agriculture.

A CD-ROM was obtained of the 1974 Sussex County, Delaware Soil Survey, prepared by the Sussex Conservation District, and was used to identify soil classifications in the Study Area.

2003-2008 State of Delaware Statewide Outdoor Recreation Plan, DNREC, February 2004.

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DNREC released its new 2003-2008 Statewide Comprehensive Outdoor Recreation Plan (SCORP) in March 2004. The SCORP contains an analysis of Western Sussex County citizen preferences, based on sampling and interviews, which were reviewed for the Comprehensive Plan. The SCORP Study indicated that walking or jogging paths, picnic areas and bike paths were high priorities.

State Strategies for Policies and Spending, Map and Text Public Review Draft, March 29, 2004, prepared by the Delaware Office of State Planning Coordination. On September 23, 2004 the Governor signed Executive Order 59 adopting the new State Strategies for Policies and Spending Map, and accompanying Text, for Delaware. The State strategies will be reviewed and revised every five years.

The Town of Ellendale was shown as a “Community Area” on the 1999 SSPS Map still in effect until adoption of the new 2004 Map and Text. The Greater Ellendale Area around it is shown as a “Secondary Developing Area” on the 1999 Map.

“Community Area” is defined in the 1999 documents as areas where population is concentrated, commerce is bustling, a wide range of housing types exist and where state policies will encourage redevelopment and reinvestment.

“Secondary Developing Areas” are defined as areas designated for growth by county plans, but not included in the state's developing areas. In these areas the state will promote efficient, orderly development and the coordinated phasing of infrastructure investment, consistent with the extent and timing of future growth, and within the limitations of state financial resources.

The 2004 SSPS Map contains important changes. It depicts the Greater Ellendale Area in the following manner:

- (1) The area within the current Town boundaries is shown as a Level 2 Investment Area with the exception of the far southeast corner of the Town, south of Willow Street and east of East Railroad Avenue, which is shown as a Level 3 Investment Area.
- (2) The Area north of SR 16 and between US 113 and SR 213 is shown partly as a Level 2 Investment Area, partly as a Level 3 Investment Area and partly as a Level 4 Investment Area.
- (3) The Area along Sharon Road between SR 16 and US 113 and Walker’s Acres are shown as Level 2 Investment Areas.
- (4) The Area along both sides of SR 213 reaching south from SR 16 to just north of Out Home Road is shown as a Level 2 Investment Area.
- (5) Smaller sub-areas on CR 227, CR232 and between Reynolds Pond Road and SR 16 are shown as Level 2 Investment Areas.
- (6) The remainder of the Greater Ellendale Study Area is shown as a Level 3 Investment Area.

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- (7) Ellendale and Redden State Forest parcels are shown as “Out of Play”.

The 2004 SSPS Text provides the following descriptions of Investment Levels 1, 2 3 and 4 Areas, as they apply to Ellendale.

Investment Level 1 Areas are often municipalities, census designated places, or urban/urbanizing places in counties. Density is generally higher than in the surrounding areas. There are a variety of transportation opportunities available. Typical transportation projects include new or expanded facilities and services for all modes of transportation. These modes include public transportation facilities and services. The modes also include bicycle and pedestrian facilities when favorable development patterns and densities exist. Buildings may have Mixed-Uses, (for example a business on the first floor and apartments above). There is a sense of place and a character to the surroundings. The area shares a common identity. Investment Level 1 Areas often are well suited to become Transfer of Development Rights (TDRs) Receiving Areas under Delaware’s TDR law.

Investment Level 2 Areas are described as areas where developments could be improved by incorporating a mix of housing types and limited commercial uses as well as interconnecting roads and bikeways between developments. They also recognize that compact development strategies may fit within areas adjacent to existing towns and population centers. These elements, designed with a greater concern for aesthetics and the environment, would revive the feel of the traditional “village,” providing a stronger sense of community. Pike Creek in New Castle County is an example of this kind of innovative development.

Investment Level 3 Areas are described as areas where growth is least appropriate in the near term among the three investment levels. Investment Level 3 is characterized by leapfrog development that is not contiguous with existing infrastructure, by high priority agricultural lands directly adjacent to natural areas and by environmentally sensitive areas adjacent to areas that have some pro-development qualities. They are viewed as areas planned for growth in the long term, but not in the short term. Development of these areas within the next five years may not represent proper and efficient phasing of development.

Investment Level 4 Areas are described as areas that are predominantly agricultural. They typically contain agribusiness activities, farm complexes and small settlements. They are found at historic crossroads or points of trade, often with rich cultural ties.

They boast undeveloped natural areas, such as forestlands, and large recreational uses such as state and county parks and fish and wildlife preserves. They are the location of scattered residential uses, with an almost total reliance on private vehicles for transportation. Investment Level 4 areas include many unincorporated communities, typically with their own distinctive character and identity. These places reflect the rich

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rural heritage of the state. In Investment Level 4 areas, the state's investments and policies should retain rural landscapes, preserve open space and farmland and establish defined edges for more concentrated development.

The Maps entitled Greater Ellendale Area – 1999 State Strategies for Policies and Spending Map and Greater Ellendale Area - 2004 State Strategies for Policies and Spending Map show the area designations of both maps.

Sussex County Comprehensive Plan Update, adopted December 10, 2002, dated January 1, 2003, prepared for Sussex County by Shafer Consulting.

On December 10, 2002, Sussex County adopted a Sussex County Comprehensive Plan Update in accordance with State requirements. The Executive Summary of the Update states that on December 23, 1999, Delaware's Cabinet Committee on State Planning Issues approved a set of management strategies 'designed to improve Delaware's Quality of Life' and that the Sussex County Comprehensive Plan Update embraces these objectives.

The Update included the "Strategies for State Policies and Spending" (SSPS) Map approved on December 23, 1999. The 1999 SSPS Map divided the Development Districts as shown on the Sussex County Comprehensive Plan Update into "Developing Areas" and "Secondary Developing Areas".

The Update states that: "It is the intent of the State to encourage growth in the 'Developing Areas' by the judicious use of State spending for infrastructure, education and other public facilities. Secondary Developing Areas are considered to be appropriate for longer-range development. It can be expected that any monies invested by the State in the Secondary Developing Areas will be limited and will depend on the phasing and timing of the development."

The Sussex County Comprehensive Plan's Future Land Use Plan presents the County's land use policies and designations Ellendale. The major land use categories are Municipality, Town Center and Developing Area.

Growth Areas - Municipalities

A major emphasis of the Sussex County Comprehensive Plan Update is to direct development toward the municipalities in accordance with their ability to accommodate growth and their desire to annex proposed new or existing development. Each Municipality has its own character and it will be important to respect their heritage when planning for future development.

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The County and State recognize that planning and zoning decisions around the municipalities will have impacts on the economy and the quality of life within the municipalities.

Development within the municipalities will be in accordance with their own zoning and subdivision regulations. To further intergovernmental coordination within Sussex County, areas surrounding the County's municipalities have been defined for the purpose of establishing an Intergovernmental Coordination Zone of mutual planning and development concern. This boundary will be utilized for the intergovernmental coordination of future planning, zoning, subdivision and related land development decisions, including Municipal annexation.

Town Centers

The purpose of the Town Center is to concentrate growth around existing municipalities while protecting their character by planning compatible development. This will require intergovernmental cooperation and coordination between the County and the municipalities concerning land use planning and annexation, review of development proposals, extension of water and wastewater systems, and provision of a multi-modal transportation network.

Developing Areas

The purpose of designating Developing Areas is to concentrate development in areas where public water and wastewater systems are available or planned and where past trends indicate that growth will occur. These areas are partially developed and contiguous to the existing municipalities. The Developing Areas will produce a mixed-use growth pattern supported by public and private investments to provide a variety of economic development and housing opportunities. By encouraging higher residential densities, and commercial and industrial uses in these Developing Areas, the pressure for development in the Low Density Areas will be reduced.

Low Density Area

The Low Density Area, comprising most of the County, is the agricultural/residential area located generally in the more rural areas of the County. Although this area is intended primarily for agricultural use, low-density residential development is permitted.

The Maps entitled Ellendale Area – Sussex County Comprehensive Plan Update - Existing Land Use, Ellendale Area – Sussex County Comprehensive Plan Update - Future Land Use and Ellendale Area – Sussex County Comprehensive Plan Update - Current Zoning present the findings of the Update in these areas.

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Sussex County Council Fiscal Year 2004 Budget - Presented May 20, 2003, Robert L. Stickles, County Administrator, Sussex County Council, Georgetown, Delaware.

This document describes the services and initiatives of Sussex County for the FY 2004 Year.

Transportation Planning

Sussex County Long-Range Transportation Plan Update, November 2001, Sussex County, the Delaware Department of Transportation and Kise, Straw & Kolodner.

In 2001, Sussex County and DelDOT commissioned the preparation of a Long-Range Transportation Study for Sussex County. The Study identified US 113 as an Arterial Road and DE 213 and 16 as Collector Road according to the FHWA Highway Classification System. Arterials are defined as “ . . . main highways other than Interstate Highways and Expressways designed to carry long distance traffic safely at relatively high speeds, but permit some interruption from side roads and adjacent properties.” “Collector Roads” are defined as “ . . . designed to handle some traffic and to permit access to adjacent properties.”

In its analysis of “Anticipated Problem Areas in 2015”, SR 16 both east and west of Ellendale, including the 16/113 intersection, were identified as local community transportation issues. 2006-2015 was identified as the timeframe for addressing these issues. The following types of improvement measures were identified: System Management (intersection improvements, shoulders, realignment), Local Road network/grid improvements (which offer alternate local routes), Bicycle Accommodations (lanes, signs, greenways, storage/parking areas), and Trucks and Heavy Equipment (truck routes, agricultural equipment lanes).

Coordinated Land Use Planning and Zoning (County and Municipal Government Function) and Compatibility with State Policies and Spending Strategies (Governor’s Cabinet Committee and the State Legislature) were identified as an Actions and Strategies applicable to all transportation improvements.

Sussex County Council Capital Transportation Improvement Program Request, Robert L. Stickles, Administrator, September 11, 2003, Sussex County Council, Georgetown, Delaware.

This document describes the following projects that are relevant to the Greater Ellendale Comprehensive Plan:

- (1) North-South Limited Access Highway – This describes the envisioned role of an improved US 113 north-south highway for Sussex County and the State of Delaware. The completion of the 45-mile SR 1 corridor between northern New

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Castle County and Dover Air force Base is likely to increase north-south traffic throughout Delaware. At the same time, the communities along the County's current north-south routes are developing, and a substantial portion of new commercial development is naturally located along existing north-south routes. The traffic involved includes County business traffic, Interstate truck and auto traffic traveling through the Delmarva Peninsula and seasonal traffic between northern Delaware, Maryland, Virginia and Pennsylvania and Rehoboth Beach, Delaware and Ocean City, Maryland. The US 113 North/South project is seen as providing a limited north-south access highway.

- (2) Ellendale – Road 213 – Old State Road – Old State Road in Ellendale is identified as a road that currently is, or will be, serving additional housing that will result in additional traffic. The C.I.P. requests that Road 213 be upgraded and sidewalks installed. It notes that the County has just completed an \$11 million sewer project for the area and that during FY 2004 the County will spend \$625,000 in Community Development Block Grant funds for home improvements and utility connections. The rehabilitation of the roadway of Old State Road and the installation of sidewalks and streetscape amenities are essential to the improvement of living standards for this area. Consideration should be given to including Beach Highway in this project.
- (3) East-West Improvements for SR 16 from SR 36 east of Greenwood to Route 1 on Delaware Bay. It states that additional funding is needed to provide for improvements to SR 16 and other County East-West roads. Improvements would include resurfacing of shoulders to highway standards and intersection improvements to include illuminating, adding left-hand turn lanes and directional signage. Sussex County and DelDOT are now giving consideration to a new East-West Highway to connect Maryland's Eastern Shore to the Delaware beach resorts. One possibility is that such a highway might be built along a new path half way between Delaware Routes 16 and 9.
- (4) Other Capital Transportation Improvement Projects requested that might have a bearing on the Greater Ellendale area include the planned development of a fixed location electronic message sign and information system, known as "Real Time Signage". The signage would communicate traffic advisories, evacuation route information, public safety notices, outdoor burning bans, Amber Alerts and other public notices. The C.I.P. also mentions the County's concern about Local Road Improvements, including adequate access for pedestrians and bicyclists and the need for hot mix rather than tar and chip resurfacing.

DelDOT is also currently preparing a new bicycling and hiking plan for Delaware. Under consideration as part of the new plan are hiking and bicycling improvements to SR 16 and other roads in the Greater Ellendale Study Area.

US 113 North/South Study and The Corridor Capacity Preservation Program – Strategies to Delay System Expansion, Focus Development and Preserve Quality of Life, prepared

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by Century Engineering, Inc., Gannett Fleming, Inc. and Remline Corp. for the Delaware Department of Transportation, undated.

DelDOT is pursuing a Corridor Capacity Preservation Program (CCPP) for US 113 in the Ellendale Study Area. The program is designed to preserve the through-traffic capacity of the highway. It is implemented in cooperation with communities and landowners who border identified CCPP corridors. It can involve building overpasses or underpasses, parallel access or service roads, and other traffic handling techniques to maintain smooth traffic flow among them, creating off-line service roads and cross access easements as well as purchasing development rights or adjacent properties where potential traffic conflicts along these corridors cannot otherwise be resolved.

Funding for particular improvements will be prioritized according to the state Transportation Investment Area each planned component is in.

In the case of US 113, CCPP is being coordinated with the North/South Study. Ultimately, the CCPP Plan for US 113 and DE 16 in Ellendale may require new service roads and other improvements along one or both sides of US 113 north and south of SR 16 and along portions of SR 16.

The US 113 North/South Study is scheduled to have developed preliminary engineering alternatives and traffic studies by mid-2004 and alignment refinement and impact assessments by early 2005. Public Outreach efforts will be underway during the course of the project.

US 113 North/South Study Environmental Inventory, prepared for DelDOT and Sussex County by Whitman, Requardt and Associates, Rummel, Klepper & Kahl and Participating Delaware State Agencies, February 2004.

During 2002-2003, the State and County determined the need to endeavor to convert US 113 into a Limited Access Highway to serve central Sussex County and connect with US 113 in Maryland, where MDOT is investing in dualization. Also relevant are the dualization improvements being planned and constructed along the Maryland portions of Route 404 from the Chesapeake Bay Bridge to Denton and the Delaware line. Route 404 feeds Delaware Beach traffic into DE Route 16 through Ellendale and Milton and Route 9 through Georgetown to Lewes.

In February 2004, the Sussex County/DelDOT US 113 North/South Study Planning Team of Whitman, Requardt & Associates and Rummel, Klepper & Kahl prepared an Environmental Inventory for the Ellendale area. A CD-ROM of the Inventory maps and source materials was provided to the Comprehensive Plan team.

The Inventory contains valuable analysis of the aquatic, wetland, terrestrial, socio-economic, cultural and historic, planning, protected lands, land use and community

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facilities, agricultural lands land evaluation site assessment (LESA) model, traffic and imagery resources in the Study Area.

Town of Ellendale Annexation Portfolio of Materials – Annexation Initiative of the 2000-2001, Town of Ellendale Town Council, 2001.

During 2000 and 2001 a major annexation initiative was proposed and processed by the Town of Ellendale. The proposed annexation area included the properties between SR 213 and US 113 north of SR 16 to a point approximately one mile north of SR 16 and south of SR 16 approximately as far as Sharon Road, including both sides of Sharon Road, an area of approximately 425 acres. (See the Figure entitled Proposed Year 2000-2001 Annexation by The Town of Ellendale).

The proposed annexation was submitted to the Office of State Planning Coordination for review in the winter of 2000/2001. On January 19, 2001 the State Planning Coordinator responded with a letter that made the following important policy statements:

- (1) It is our understanding of the State that annexation of the parcels proposed would enable them to be served with public (county) wastewater facilities.
- (2) Normally, the State would be reluctant to support an annexation so large in relation to the current size of the town, however, under the circumstances, the State does not object to this proposal.
- (3) The Town should weigh the costs and benefits of supporting any future development that may occur on the annexed parcels.
- (4) DelDOT commented that the Town should accept Wild Cherry Street, and that portion of Old State Road that would pass through the Town (about one mile), for municipal maintenance.
- (5) DNREC recommends that, should any new development be proposed on these parcels, it should be permitted only within the area bounded by the moderately well drained portion of the Klej soil type. Proposed development should include Best Management Practices (i.e., stormwater management and buffers) to mitigate nutrient and sediment runoff into adjoining streams and watercourses.
- (6) DelDOT further noted that US Route 113 in the area of Ellendale is subject to their Corridor Capacity Preservation Program. Under this program, the Department seeks to preserve the capacity of certain arterial highways to handle through traffic by managing the access along them. The effect of the program on the lands now proposed for annexation is that DelDOT will not permit new entrances there. If the property owners whose lands front on Route 113 wish to develop or redevelop them, they will have to do so using other existing roads or new roads created for that purpose, not Route 113.
- (7) If this annexation is approved, the State strongly suggests that the Town of Ellendale create a comprehensive plan to help the town determine ‘what it plans to look like’ and to address the issues associated with growth.

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After a thorough and spirited community debate the question went to a referendum of “inside Town” voters and a separate referendum of “outside Town” voters on June 9, 2001 at the Town Hall, as required by the Town of Ellendale Town Charter, and failed to gain approval in the “outside” referendum.

Ellendale Housing Needs Assessment Executive Summary, Submitted to Discover Bank CRA Fund by Sussex County Community Development and Housing Division on behalf of the Sussex County Council, November 15, 2000, funded through Discover Bank CRA Funds.

In November 2000, at the same time that Sussex County was beginning to install the new Ellendale-New Market Sanitary Sewer District, the Sussex County Community Development and Housing Division completed an Ellendale Housing Needs Assessment. The Executive Summary of November 15, 2000 states that:

“The Community of Ellendale, located in the northern central section of Sussex County, Delaware, has long been of concern to residents, local, county and state officials, and private sector organizations involved in community development. The Town of Ellendale and surrounding community have been identified by county and state officials as one of the most economically distressed areas in the State of Delaware.

The survey done for the assessment began in September 2000, using 25 County employees, 15 representatives from First State Community Action Agency and local groups. A HUD-approved methodology was used.

It was determined that there were 3 factors adversely affecting quality of life in the identified area:

- (1) Substandard housing conditions. 185 of the 475 homes in the area were found to be substandard according to HUD guidelines. One half of these were classified as severely substandard.
- (2) Substandard water and wastewater disposal systems. 232 households were found to have inadequate drinking water and/or wastewater disposal systems, with a daily impact on over 600 Ellendale citizens.
- (3) Household income levels. 86%, or 409, of the 475 households fell within HUD’s low-income guidelines.

The Study Area used for the Assessment is the service area of the Ellendale-New Market Sanitary Sewer District. The following findings were made:

Of the 475 housing units, 370 were owner-occupied (78%) and 105 (22%) were rental units. Units were surveyed for deficiencies such as inadequate plumbing systems, inadequate electrical and heating systems, substandard exterior siding allowing for excessive heat loss, inadequate insulation, no storm windows or doors, substandard roves

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and substandard flooring. Units with one or more deficiency were classified as substandard. Units with three or more deficiencies were classified severely substandard. There were a total of 185 substandard and 104 severely substandard units. 233 units were found to have inadequate drinking and/or waste disposal systems.

The survey estimated that approximately 1,294 persons lived in the target area. The estimated population under 18 years of age was 385, over the population over 18 estimated to be 909. 190 households had children and 285 did not.

Using Delaware State Housing Authority income and family size benchmarks (for a family of 4, for instance, the low income threshold for Sussex County is \$35,750 and the very low income threshold is \$22,350) for Sussex County, the survey found 86% of the household to have low/moderate incomes and 70 to have higher incomes. 1,121 persons were found to live in low/moderate income households.

The Summary notes that over the past 15 years over \$580,000 in housing rehabilitation funds has been invested in the target area, including funds provided by the US Department of Housing and Community Development, the Delaware State Housing authority, Sussex County First State Community Action Agency, the Rural Development Program, of the US Department of Agriculture and local and non-profit agencies.

The Assessment identified the following potential future funding sources for target area housing rehabilitation:

- (1) Delaware State Housing Authority Neighborhood Revitalization Fund funds,
- (2) CDBG rehabilitation grants and Housing Revolving Loan Program (HRLP) funds through the Sussex County Community Development and Housing Division
- (3) Rural Economic Development grants and loans, through the US Department of Agriculture
- (4) First State Community Action Agency (RC&D) funds for emergency weatherization and emergency housing repairs, and
- (5) Funding provided by local church and community groups.

It should be noted that the New Hope Village trailer park on south Old State Road is generally viewed as one of the distressed housing areas in Delaware, and one for which extensive rehabilitation should be pursued.

Potential Historic District in Ellendale, Delaware – Memorandum prepared by Ms. Leslie Bashman for the Delaware State Historic Preservation Office, Bureau of Archaeology and Historic Preservation (the name has since been changed to Division of Historical and Cultural Affairs), August 24, 1992. The memorandum stated that the district evaluation was “. . . based solely on National Register Criteria C with regard to the appearance of a good collection of nineteenth and early twentieth century buildings in the community”.

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This potential national register historic district is identified on the map exhibit entitled Town of Ellendale Railroad Square Potential Historic District. The area defined is the historic late 19th-early 20th century railroad village of Ellendale.

The Sussex County Comprehensive Plan Update notes that there is a potential historic district in Ellendale. It also identifies two historic structures in the Greater Ellendale Area which are now listed on the National Register of Historic Places:

- (1) The Ellendale State Forest Picnic Facility on US 113 one-half mile south of DE 16, in Georgetown Hundred, listed on July 22,1991.
- (2) Teddy's Tavern, on the east side of US 113 0. One mile north of the US 113/DE 16 intersection, in Cedar Creek Hundred, listed on July 22,1991.

D. Existing Land Use

Existing Land Use for the Town of Ellendale and the Greater Ellendale Area is presented on the maps entitled Greater Ellendale Area Existing Land Use and Town of Ellendale Existing Land Use. Existing Land Use is mapped and described for both the Town of Ellendale and the remainder of the Study Area.

The Existing Land Use map shows the following land use categories:

Agricultural – Land occupied by farms, farm buildings and accessory farm businesses are shown in areas throughout the Study Area. This use predominates in the northern, eastern and western portions of the Study Area outside the Town limits. The Area is rich in prime agricultural lands. Limited low-density residential uses, in support of agriculture, also exist on these lands.

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Natural Resource - Natural resource areas of open, conserved and undeveloped land, including forests, waterways and the Ellendale Swamp. Government, non-profit conservation organizations or private landowners may own these lands. This land use is especially important in the Greater Ellendale Study Area because of the major presence of the Redden and Ellendale State Forests, Delaware's largest state forest holdings, and the privately owned 1,000-acre Ellendale Swamp. Natural Resource lands predominate throughout the southern portions of the Study Area. They also exist to the east, north and west.

Residential – Land occupied by buildings used primarily as dwelling units for residential living by households and families. Residential land use in the Study Area is concentrated in the southern portions of the Town, south of and including both sides of Main Street, in the northeast corner of the Town between Ponder and Prettyman Avenues, and along Old State Road (SR 213), Beach Highway (DE 16) between Old State Road and US 113, Sharons Road (CR 641) between Beach Highway and the DuPont Highway, Reynold's Pond Road, CR 227 and CR 232.

Residential/Mobile homes – Land occupied by mobile home units. Within the Study Area, two important residential/mobile home areas are at New Hope Village on South Old State Road and New Market Village on Reynolds Pond Road.

Commercial – Land occupied by buildings or areas used for convenience, specialty or general merchandise retail, service or office uses. Commercial use in the Study Area occurs at the intersection of US 113 and DE 16, and to lesser degrees at the intersections of DE 16 with CR 213 and DE 16 (Main Street) and East and West Railroad Avenues.

Institutional/Civic– Lands occupied by buildings or areas owned by government or non-profit institutions including municipal facilities, churches and rectories, and used for public or civic purposes. This category includes the Town Hall, Town Park, U.S. Post Office, Fire Hall buildings in the Study Area. It also includes the properties of New Zion A.M.E., Ellendale United Methodist, Shiloh A.M.E. and other churches in the Study Area. Day Care Centers and cemeteries are included in this land use category. The publicly owned Kent-Sussex Detox Center on Main Street is also included.

Commercial/Industrial – Land occupied by buildings or areas used for manufacturing, assembly, distribution and power generation. The property on the west side of the Norfolk and Southern Rail Line, north of Main Street, that is used by Delaware Coastal Railway is included in this land use category. The former store and current salvage yard property at the southwest corner of Beach Highway and Old State Road is included in this category.

Open Space – Publicly owned land occupied by open space and used for public recreational activities, including parks, playgrounds, trails and natural areas reserved as open space. The Town Park, which is Institutional in ownership, is included in this category because it is the Town's most important open space.

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Transportation – Publicly owned land used for highways, streets, roads and alleys, highway interchanges, and publicly owned open landscaped areas at street or road intersections.

Utility – Land occupied by structures or areas owned and used by public or publicly regulated utilities. The Sussex County Transfer Station on South Old state road, opposite from New Hope Village, and the Tower on this site, are included in this category.

Waterways – Natural water bodies.

Vacant – Land not in any active use for any of the purposes described above. The former gas station and the former Town Dump on Ponder Avenue are included in this category.

The Existing Land Use Map also shows property lines, railroads, the current municipal boundary of the Town of Ellendale and the Potential Growth and Annexation Area boundary.

Community Places

From the perspective of community planning, land uses should be seen as gathered together in the form of community places. Community places may be residential neighborhoods, working landscapes of farms and natural areas, commercial centers or industrial areas. Most often, they are mixtures of several kinds of land uses.

Community places are shaped by history, by transportation, by social and economic influences and by community aspirations. They may be rich or poor, in excellent or substandard condition, vacant or occupied or growing or declining. They often overlap with each other, making them all the more interesting. Each possesses a special character, understanding character to mean the unique special essence of a person or place, that quality which makes it stand out and be memorable.

The following is a concept of the community places, many overlapping, of the Greater Ellendale Study Area:

The Town Center

The Town and the greater Ellendale Area are centered on the intersection of the north-south rail line and Main Street. It was and is the rail junction. In this center, there were a variety of railroad, business, institutional and residential uses in earlier decades. The pattern of Mixed-Uses characteristic of the nineteenth and early-twentieth century railroad and village environment is still present, although faintly.

Today, the “Railroad Square” area includes historic homes, late nineteenth century buildings designed to house stores, the modern Ellendale Trading Center and, only one

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block away, the Fire Hall, Ellendale's most prominent modern structure. The Social Room in the Fire Hall is the community's most active indoor gathering place. The Town Center is made more distinct by being at the entrance to the Forest and Swamp.

The Town Hall, Police Department, Town Park and U.S. Post Office, as well as the Ellendale United Methodist Church, are located along MacCauley and Washington Streets, just to the west.

The Railroad Siding Area North of Main Street

This was once the industrial hub of Ellendale and still retains this function to a limited degree. The tracks are in the center of a tract of well over 25 acres of vacant and undeveloped land. There remains a group of small industrial buildings at its north end.

The Open Lands in the Northern Part of the Town

This expanse of open land, once industrial and largely devoted to the lumber and wood processing function of the Town, is today open space that contributes to the quietness of the Town.

The Southeast Corner of the Town

Here the historic village comes together with the Forest and the remaining Queen Anne's Railway trackage in a unique manner. This is a beautiful place where Town and Forest join in a secluded and serene fashion.

The Northeast Corner of Town

The neighborhood between Ponder and Prettyman Avenues north of Kings Alley has the newest single-family homes in the Town of Ellendale, a quality that gives it a special character.

The Core of the Historic Village

The buildings lining the north edge of Main Street and the buildings south of Main to the southern Town Line comprise the historic settlement begun along the railroad lines in the second half of the nineteenth century. There is an interesting mix of Victorian and everyday-style houses, sheds, barns, stables, a church and former shops in this area. It is the area that has been identified as a potential historic district.

Main Street, Shorts Alley, King's Alley, Donovan Street, Prettyman Avenue, Willow Street, Ponder Avenue, Read Street, Welch Alley, Ellegood Avenue, State Street, Washington Avenue, MacCauley Street, and the twin Railroad Avenues all possess the

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qualities of historic streets in the best sense of evincing a pleasant scale while displaying a variegated and diverse architecture of building types and styles.

The Road to Slaughter Beach

At the northeast corner of the Town, there is a grouping of special uses that include the now vacant former gas station, the former Town Dump site and the Ellendale Cemetery.

Old State Road, North and South

One of the most unique places in Ellendale is Old State Road, a creation of the time just after the American Revolution. It is unique because it is remarkably straight. In its course from Milford to Georgetown, it serves as a locus for a broad variety of places, some large, handsome farms, some linear housing developments, some churches and villages and some very poor neighborhoods.

The north section of Old State Road in Ellendale is lined by houses on its east side, with some single family homes on the west side farther north. Most of the homes were built in the time period between 1970 until the present. This neighborhood has a mixture of urban and rural features. It is completely continuous with the Town, and the houses that line the east side of the road are for the most part within the current Town boundary. In many respects, this neighborhood is focused on the New Zion A.M.E. Church and New Hope Community Center across the street.

The south section of Old State Road is separated from the Town by a large tract of woodland and farmland. It is also older. Here the homes appear to have been built in the early twentieth century. Some older homes appear to have been moved into the area from other locations. This linear neighborhood is a countryside hamlet with two important neighborhood churches, the Philadelphia Holiness Pentecostal Church and New Shiloh A.M.E. Church. It is truly a hamlet in a forest. This is a neighborhood with many homes in need of rehabilitation.

Beach Highway Between the DuPont Highway and Old State Road

This area includes a variety of older, historic houses, mobile homes and newer units, as well as open farm field touching the road and significant automobile and truck-oriented commercial uses at the US 113 intersection.

Sharon's Road and Walker's Acres

Sharon's Road is a neighborhood of larger single-family homes and residential lots between Old State Road and the DuPont Highway. Like the neighborhood on the east side of North Old State Road, it is to a significant degree focused on New Zion A.M.E. Church. Walker's Acres is continuous with the Sharon's Road neighborhood.

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DE Route 16 and SR 213

This is a historic and traditional corner of the community. It is also a main traffic intersection. It has been the location of a mixture of uses over time. In some ways, it has been more of a junction of its adjoining neighborhoods rather than a true neighborhood center in and of itself. This is partially exacerbated by the evolution of traffic conditions on Delaware Route 16 (Beach Highway and Main Street) and SR 213 (Old State Road). Presently, the former store building and salvage yard at the southwest corner is being prepared for cleaned up salvage yard operation and long-term commercial development by its new owner, and used by the Ellendale Police Department as an outpost to patrol through traffic through Ellendale.

Also present at the intersection are several dilapidated trailers, vacant and overgrown lots, and a church.

US Route 113 and DE Route 16

The US 113/DE Route 16 intersection also has the identity of a major highway commercial intersection in the making. This is evidenced both by existing uses and the proliferation of commercial real estate signs on its corners. The former restaurant at its southeast corner is now a social service center. In addition, US 113, south of the social service center, is a residential neighborhood.

The Ellendale Swamp Area and The Forests

The Ellendale Swamp and large portions of the Redden and Ellendale State forests provide a continuous mantle of green around the southern edge of Ellendale, broken only by Old State Road. This is the prehistoric natural environment out of which the built environment and economy of Ellendale was made. It is also an area of primary statewide concern.

The Farmlands

Farmlands punctuated by blocks of forestland ring the western, northern and eastern edges of Ellendale. This area has the classic visual character of southern Delaware rural landscape at its best. In several areas, recently built homes line portions of the country roads.

New Market Village

The surviving portions of New Market Village, the early nineteenth century stagecoach and farming hamlet that was replaced by Ellendale, contains old and new homes, farms, undeveloped land and the New Market Village mobile home park.

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Table 20 shows categories and approximate acreages of existing land use within the Current Town Boundary. Table 21 shows categories and approximate acreages of existing land use within the area between the Current Town Boundary and the Potential Growth and Annexation Area boundary.

Table 20
The 2004 Greater Ellendale Comprehensive Plan
Approximate Acreages of Existing Land Use By Category and Acreage
Within the Current Town Boundary

Agriculture/Natural Resources/Open Space	40.67 24.00
Commercial/Industrial	1.99 1.00
Institutional/Civic/Governmental	15.33 9.00
Residential-Single	53.59 32.00
Residential-Mobile Home	6.05 4.00
Residential-Vacant	24.10 14.00
Utility/Public	0.39 0.00
Public Rights-of-Way and Other	32.48 14.91
Total Sum of ACRES	167.02
Total %	100.00

Source: Nutter Associates & SU Regional GIS Cooperative

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Table 21
The 2004 Greater Ellendale Comprehensive Plan
Approximate Acreages of Existing Land Use By Category and Percentage
For The Area Between the Current Town Boundary and PGAA Boundary

Agriculture/Natural Resources	734.34 61.00
Commercial/Industrial	37.02 3.00
Institutional/Civic/Government	25.77 2.00
Residential-Apartments	1.34 0.00
Residential-Single	113.08 9.00
Residential-Mobile Home	120.28 10.00
Residential-Vacant	107.71 9.00
Transportation	58.55 5.00
Total Acres	1,197.90
Total %	1.00

Source: Nutter Associates & SU Regional GIS Cooperative

□ Environmental Protection – Key Issues

Key environmental issues include protecting the water quality of the streams that rise in Ellendale and flow into major tributaries of the Nanticoke River and Delaware Bay Estuary Watersheds. In addition to non-point source pollution, air quality and open space, key issues include protection of drinking water supplies, groundwater recharge area, adequate stream buffering, wetland protection and flood protection. Two factors must be considered: runoff from agricultural lands and runoff from developed areas. This includes the new concept of TMDL's (Total Maximum Daily Loads of Nitrogen and Phosphorus). Preservation, conservation and expansion of undeveloped green space are important factors.

E. Current Zoning and Code Enforcement

The most far-reaching component of land use planning in the United States is zoning. Current zoning in the Study Area is shown on the Map entitled Greater Ellendale area: Current Sussex county Zoning, which shows existing County Zoning both inside and outside the Town limits.

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Delaware's Comprehensive Planning laws allow counties and municipalities up to eighteen months after the adoption and certification of comprehensive plans to revise their zoning ordinances.

In order to implement the Sussex County Comprehensive Plan Update adopted in January 2004, the Sussex County Council is processing five zoning amendments. These include:

- ☐ Adding a new section creating an environmentally sensitive development district overlay zone
- ☐ Allowing Agricultural Related industry as a conditional use in the agricultural residential zoning district, defining agricultural related industry
- ☐ Allowing a biotech industry and a biotech campus as a conditional use in the agricultural residential zoning district and defining biotech industry and biotech campus
- ☐ Creating a new C-2 large scale commercial district, and
- ☐ Amending provisions relating to residential uses in the B-1 and C-1 commercial zoning districts by limiting such uses to 4 dwelling units per acre.
- ☐ Eliminating Large-Scale Uses from the B-1 Neighborhood Business District and the C-1 General Commercial District
- ☐ Allowing Cluster Development of Residential Structures within AR-1 and AR-2 Districts
- ☐ Adding a new section to create a Combined Highway Corridor Overlay Zone with new building setbacks

Current Sussex County Zoning and Code Enforcement

The Sussex County Zoning Ordinance and County Zoning Map, which constitute Chapter 115 of the Sussex County Code, govern zoning within the Town of Ellendale and its surrounding area. Chapter 115 defines the following types of zoning districts in the Greater Ellendale Area.

With the exception of only two parcels of land, all property in the town limits is zoned UR – Urban Residential. The two exceptions are (1) the parcel at the northwest corner of Main Street and West Railroad Avenue, now occupied by The Ellendale Trading Company and (2) a parcel on the south side of Main Street between West Railroad Avenue and MacCauley Street that was formerly a Bed and Breakfast. Both of these parcels are zoned UB – Urban Business.

Outside the Town limits, most of the Study Area is zoned AR-1 – Agricultural Residential, the prevalent zoning classification in Sussex County's rural areas. North Old State Road, north of the Town Line, including a 150 foot deep tier of land on the west edge of the road, and extending east to the Norfolk and Southern Railroad track, is zoned GR – General Residential. South Old State Road south of the Town Line, extending

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approximately 200 feet deep on both the east and west sides of the road, is also zoned GR.

Four parcels in the northeast corner of US 113 and DE 16 are zoned C-1 – General Commercial. At the southeast corner of 113 and 16, two small parcels fronting on 113 are zoned C-1 and B-1 – Neighborhood Business, respectively.

The relatively highly developed residential area along the remaining frontage of DE 16 between Old State Road and US 113, the length of Sharon Road between 16 and 113 and Walker's Acres are zoned AR-1 – Agricultural Residential.

Sussex County Zoning Text

UR - Urban Residential Districts

The purpose of these districts is to provide zoning regulations for incorporated municipalities having no zoning provisions of their own and which choose to come under the Sussex County Comprehensive Zoning Ordinance. The pattern of most areas within incorporated municipalities is already established by existing structures and uses. The intent of the UB regulations, therefore, is to prevent deterioration and abuse of the existing pattern in each locality of a municipality. To avoid making a majority of the existing structures and uses nonconforming, UB regulations are broadly flexible.

AR-1 and AR-2 - Agricultural Residential Districts

The purpose of these AR districts is to provide for a full range of agricultural activities and to protect agricultural lands, as one of the county's most valuable natural resources, from the depreciating effect of objectional, hazardous and unsightly uses. They should also protect established agricultural operations and activities. These districts are also intended for protection of watersheds, water resources, forest areas and scenic values and, at the same time, to provide for low-density single-family residential development, together with such churches, recreational facilities and accessory uses as may be necessary or are normally compatible with residential surroundings. The AR regulations seek to prevent untimely scattering of more-dense urban uses, which should be confined to areas planned for efficient extension of public services.

MR - Medium-Density Residential Districts

The purpose of the MR district is to provide for medium-density residential development in areas which are or which are expected to become generally urban in character, but where sanitary sewers and public water supplies may or may not be available at the time of construction, together with such churches, recreational facilities and accessory uses as may be necessary or are normally compatible with residential surroundings. The district

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is located to protect existing development of this character and contains vacant land considered appropriate for such development in the future.

Although there are presently no MR districts in the Greater Ellendale Study Area, this category may be of interest for possible future use.

GR - General Residential District

The purpose of the GR General Residential district is to provide for medium-density residential use, including all mobile homes. Mobile homes shall include those that do not meet certain characteristics of mobile homes permitted in AR Districts, as described in County regulations § 115-20A(1).

C-1 - General Commercial Districts

The purpose of the C-1 General Commercial district is to provide for retail shopping, personal services and a wide variety of commercial and miscellaneous service activities generally serving a community-wide area. Such uses are generally located along major arterial roadways where a general mixture of commercial and service activity now exists. Such uses shall not be characterized by extensive warehousing, frequent heavy trucking activity, open storage of materials or the nuisance factors of dust, odor and noise associated with manufacturing.

The Sussex County Council is presently considering a zoning amendment to limit the number of residential units allowed in C-1 districts to four per acre.

Recommended Creation of Municipal Zoning for the Town of Ellendale

Given the critical importance of planning and zoning in good community land use development for Ellendale, creation of a municipal zoning ordinance is strongly recommended for the successful implementation of the Comprehensive Plan. This would also require the creation of a Town of Ellendale Planning and Zoning Commission and a Board of Adjustment to hear appeals. Good training opportunities, in the form of conferences or seminars sponsored by the University of Delaware or other State or regional entities, can be offered to members of the new Planning and Zoning Commission, the Board of Adjustment and Town Council.

The following emphases are recommended for comprehensively revising Ellendale's Zoning Ordinance:

- ☐ Make it as thorough, up-to-date and user-friendly an ordinance as possible.
- ☐ Provide good definitions ("bed and breakfast", for example) to help the Planning and Zoning Commission, the Board of Adjustment, the Code Enforcement Officer

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and the Town Council in their zoning responsibilities. Good definitions lessen the possibility of disputes about permitted uses.

- ☐ Consideration should be given to eliminating the Agricultural District given the dynamic of land development and water and sewer service in and around Ellendale. It may be possible to consider making agriculture a permitted use in the R-1 or R-2 Districts.
- ☐ Establish a R-1 Zoning District for residential areas.
- ☐ Consider creating a Railroad Square or Town Center (T-C) Zoning District to reflect the urban characteristics, values and goals of the historic Railroad Square area as well as portions of the adjacent Historic Area. This District would include such provisions as no or minimal requirements for building setbacks from sidewalks or right-of-way lines, a statement of intent which reflects the value of continuing the mixed-use, interdependent, pedestrian-oriented tradition of the center, coordination of façade treatments, period style signage, appropriate landscaping types and provision for the some shared use parking areas.
- ☐ The statement of intent for each of the use districts in the ordinance should be carefully written to reflect the best character and essential purpose for having the district as part of the ordinance.
- ☐ The potential Town of Ellendale/Railroad Square Historic District should be reflected in the new Zoning Ordinance as an Overlay District. Within the Overlay District the Planning and Zoning Commission should be authorized to consider the U.S. Secretary of the Interior's Standards and Guidelines for Historic Preservation in conducting site plan reviews.
- ☐ Consideration should be given to creating a small Commercial Zoning District at the Old State Road/Main Street intersection.
- ☐ The zoning revisions should consider the zoning classifications most likely to be applied to new land areas which may be annexed to the Town of Ellendale in future years, whether residential, commercial or industrial in nature.
- ☐ Provisions for Site Plan Review should be reviewed and updated with specific reference to the role of the Planning and Zoning Commission, implementing the Comprehensive Plan through design standards appropriate for Ellendale and, as mentioned above, applying the Secretary of the Interior Standards within a Historic Area Overlay District.
- ☐ Consideration should be given to applying special waterfront buffer areas to protect the edges of the waterways located within the Town. This should be coordinated with DNREC standards for riparian buffers and with FEMA and 100-year flood plain management requirements.
- ☐ Provision should be made in the ordinance for the use of the technique of clustering, which allows variations in density on different portions of a site, reserving its most sensitive and attractive environmental features in the form of open space – in appropriate residential locations.
- ☐ Consideration should be given to including a Planned-Unit-Development (PUD) provision in the ordinance for large parcel mixed-use development projects under single or unified ownership and requiring staged development with master planning

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at each stage. Such projects may be appropriate and feasible either within the current Town boundary or for sites that may be added through annexation in future years.

- ☐ The Zoning Ordinance should specifically identify all uses that would be permitted in each Zoning District. The ordinance should specify three types of uses for each district: principal uses, accessory uses and special uses. Special uses are those that may have special impacts and require additional review by the Planning and Zoning Commission in performing site plan reviews.
- ☐ Each zoning district should be carefully drawn on an Official Zoning Map that will become part of the Zoning ordinance. Ideally, the Official Zoning Map will be a fully computerized Geographic Information System (GIS) map showing individual ownership parcels.
- ☐ Parking and roadway access standards should be addressed in consultation with DelDOT.
- ☐ The new zoning ordinance should specifically refer to the Comprehensive Plan to illustrate the role of the Ordinance in implementing the Plan.
- ☐ A Density Control Table should be provided as part of the Ordinance. This table will specify for each use, by zoning district, such dimensional requirements as minimum lot size, minimum lot area per unit, maximum building height, maximum lot coverage and required setbacks or yard requirements.
- ☐ Appropriate illustrative material should be added to the text to illustrate the layout of permitted lot and yard setbacks, parking layouts, landscaped buffers and other important zoning relationships.
- ☐ A process diagram should be included to illustrate the manner and steps by which zoning applications will be processed by the Town.
- ☐ In addition to comprehensively revising the town's Zoning Ordinance, the town should also develop Subdivision Regulations that reflect conservation design and cluster techniques, and examine other code provisions for material which might be updated.

Flood-Prone Districts

The County Ordinance defines overlay district regulations called "flood-prone districts" to provide controls for land areas adjoining a stream, river, estuary, ocean or other watercourse which have been or may be covered by the floodwaters of a one-hundred-year flood or be subject to shoreline erosion caused by a one-hundred-year flood. These areas follow the contours of the national FEMA flood insurance maps.

F. Transportation

The Plan considers the following transportation facilities:

- ☐ **The Norfolk & Southern Railroad**

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Norfolk & Southern Railroad uses the one-track north-south line for approximately four freight trains per day, Monday through Saturday. There are sometimes additional freight runs. The freight trains carry bulk cargo between the Harrington Yards, Frankford and Indian River. For the past twelve years, the Delaware Transit Corporation sponsors a very popular annual "RAIL to the FAIR" passenger train from Philadelphia to the Harrington State Fair and from the Fairgrounds to Frankford. During the November 2002 Georgetown Return Day celebration, Norfolk and Southern sent its hospitality train to the Georgetown Train Station. It will repeat that run in November 2004.

☐ Streets & Roads, by Functional Classification & Capacity

The Transportation Map identifies Ellendale's highways, streets, railroad lines and waterways. The map identifies streets by functional classification, including US highways and local roads. AADT traffic volume counts have been obtained from DelDOT for major roads.

DelDOT's 2003 Existing Traffic Data and Future Year Traffic Projections for Ellendale's major roadways are presented in Table 22.

Table 22
The 2004 Greater Ellendale Comprehensive Plan
Existing & Projected Average Annual Daily Traffic for Major Roads

<u>Average Annual Daily Traffic (AADT) Data</u>				"Existing Traffic Data"		"Forecast Traffic Data"		
				2002 AADT	Functional Classification	2005 Forecast AADT	2015 Forecast AADT	2025 Forecast AADT
US 113	Georgetown Limits to SR 16			18393	Principal Arterial	20048	25060	30073
US 113	SR 16 to S 207			14396	Principal Arterial	15692	19615	23537
SR 16	S 36 to US 113			4076	Major Collector	4412	5582	6809
SR 16	US 113 to W. Ellendale Limits			5415	Major Collector	5862	7210	8652
SR 16	W. Ellendale Limits to E. Ellendale Limits			5059	Major Collector	5476	6818	8182
SR 16	E. Ellendale Limits to S 227			4618	Major Collector	4999	6324	7715
SR 16	S 227 to SR 5			4231	Major Collector	4580	5794	7068

Source: DelDOT

DATE: October 28, 2003

- 1) Source: 2002 AADT from DelDOT "2002 Traffic Summary".
- 2) Source: TPG, K, D, T/AADT, and T/dhv from DelDOT "1996 Traffic Summary".
- 3) Source: 2005-2025 Forecasts from Fall, 2002 Sussex County Transportation Plan model runs.

Table 23 illustrates seasonal traffic patterns on US 113 and Delaware Route 16 in the Greater Ellendale Area.

Table 23

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The 2004 Greater Ellendale Comprehensive Plan 1993-2002 Seasonal Traffic Patterns on US 113 and Delaware Route 16 In the Greater Ellendale Area

SR 16 West of US 113

	1993	1996	1999	2002
January	2116	2066	2831	3038
February	2098	2191	2986	3248
March	2305	2583	3155	3444
April	2890	3161	3602	3697
May	3786	3912	4333	4424
June	4355	4569	4907	5003
July	5240	5084	5534	5460
August	5068	5228	5505	5414
September	3857	3897	4380	4431
October	2994	3425	3744	3919
November	2659	3081	3524	3602
December	2185	2639	3515	3232
Average	3296	3486	4001	4076

Note: Counter was installed in 1993 so data is only available after that year.

US 113 North of Ellendale

	1993	1996	1999	2002
January			33952	11520
February			36986	12702
March			32622	13233
April			20337	13588
May			22728	14657
June			29181	15770
July			28506	17756
August			26927	18070
September			25617	15446
October			24527	14100
November			23826	13412
December			35959	12503
Average	3296	3486	28430	14396

Note: Counter was installed in 1998 so data is only available after that year.

US 113 South of Ellendale

	1993	1996	1999	2002
January			8644	10981
February			9517	12589
March			10056	12975
April			10929	13291
May			12125	14341
June			13102	15536
July			14853	0
August			14791	17969

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September			12415	15452
October			11372	14046
November			10603	13079
December			10967	12239
Average	3296	3486	11614	14092

Note: Counter was installed in 1998 so data is only available after that year.

The seasonal tables show that a major build up of traffic is occurring on both US 113 and Delaware Route 16. Traffic peaks in July with the peak of the beach tourism season. The seasonal figures dramatize the need for adequate traffic planning for the entire length of Route 16 through the Town as well as for decisive action on the US 113 North/South Limited Access Highway Study.

☐ **Public Transit Service**

Table 23
The 2004 Greater Ellendale Comprehensive Plan
Existing & Projected Average Annual Daily Traffic for Major Roads
DART First State Transit Route 210 ridership

Year	Riders
FY'00	5,047
FY'01	5,190
FY'02	7,494
FY'03	8,267

Table 23 shows that ridership on Route 210 increased by 64% between FY' 00.and FY' 03. Route 210 has 8 trips daily, with no additional trips added to the service since its inception. 3 of the 8 trips travel the US 113 Express Alignment each day.

In May of this year, Route 210 was absorbed into the Route 303 service, which serves the same stops but connects with Dover.

The Delaware Transit Corporation feels that the Route has performed poorly on a ridership per hour basis (for FY '03 it was 4 riders per platform hour which is low in relation to most of DTC's transit routes).

DART's goal for future service is to connect Ellendale with the larger service areas of Georgetown, Milford and Dover.

☐ **Pedestrian and Bicycle Circulation**

A state bicycle route has been designated along portions of Route 16 from Ellendale west to Greenwood. Given the great popularity of biking and hiking on Delmarva, there appears to be greater potential for designated bike routes, perhaps along the Queen

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Anne's Railway line. Ellendale is a walkable town and it appears that pedestrian routes and trails should be given considerable new emphasis in future years.

G. Community Facilities and Services

The Town Park has been extensively renovated in recent years. Ellendale has a new U.S. Post Office.

❑ Electricity, Gas, Telephone & Internet Service

Verizon provides local and long distance telephone service as well as high-speed, broadband Internet access. Comcast provides Cable TV. Both Verizon and Comcast now offer high-speed Internet service to Ellendale subscribers. Electrical service is provided by Conectiv Power Delivery, Inc. within the Town and by Delaware Electric Cooperative outside the Town.

❑ Public Schools

The children of Ellendale attend public school at the Lincoln Elementary School, Milford Middle School and Milford High School.

❑ Public Safety: Ellendale Police Department & Ellendale Volunteer Fire Company, Inc

Municipal Services and Revenues

The 2003 Annual Budget of the Town of Ellendale totaled approximately \$112,500 in expense and income. Of the total, approximately \$70,000 is for the Ellendale Police Department, as described below. Other services include town management and administration by the Mayor and Town Council, grass cutting and streetlights. Major sources of income included fines from speeding tickets (approximately \$70,000), Municipal Street Aid from the State of Delaware (\$23,530.00), and Realty Transfer Tax revenue from Sussex County (\$15,000.00).

The following possible future municipal services and revenues have been identified: additional police department services to provide security to a growing Town, a full- or part-time Town Manager or Town Clerk/Office Manager, possibly on a Circuit Rider basis, a part-time Code Enforcement Officer to enforce a new Town municipal Zoning Ordinance and other new code provisions, trash pickup and an annual amount for selected town improvement projects.

Ellendale Police Department

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The Ellendale Police Department consists of 2 sworn officers. It has 3 police cruisers. The Police Department has maintained a complaint clearance rate of 89 percent over the past several years. The Statewide clearance rate is 67%.

Table 24
The 2004 Greater Ellendale Comprehensive Plan
Reported Crime Statistics for the Town of Ellendale, 1993-2002

Report Year	Total	Total Cleared	Part I	Part II	Violent Part I
2002	117	105	15	102	4
2001	167	143	11	156	0
2000	118	95	11	107	1
1999	96	60	14	82	0
1998	30	15	8	22	2
1997	64	42	12	52	2
1996	122	105	14	108	2
1995	75	52	11	64	0
1994	84	51	14	70	1
1993	45	32	4	41	0

In a July 19, 2004 memorandum from Police Chief Floyd Toomey to the Town of Ellendale Mayor and Council, the impact of adding 300 additional households to the Town of Ellendale was estimated. It was felt that such an increase in Town population would require an increase from the present two officers to 5 officers. This would result in an estimated budget increase to \$331,360.00.

Ellendale Volunteer Fire Company, Inc.

The Ellendale Volunteer Fire Company, Inc. provides fire service to a 58 square mile service area centered on the Town of Ellendale. The District reaches from Redden Crossroads in the south to Lincoln in the north and from Oakley in the west to Jefferson Crossroads in the east. It contains an estimated 12,000 mailing addresses.

The Company has 65 active members plus many others who contribute time and expertise as associates. The Company's service area stretches from Johnson Road (CR 207) in the north to Redden Road (CR 565) in the south and from Webb's Farm Road (CR 594) in the west to Coastal Highway (DE Route 1) in the east. The Company also provides mutual aid to the fire departments of Milford, Slaughter Beach, Milton, Georgetown, and Greenwood as well as any other departments requesting aid.

The Company was founded in 1920 and currently has 19 volunteer officers, 46 volunteer firefighters. It has recently added paid Em's during the day. It operates from a ten-bay firehouse on Main Street in Ellendale, which was built in 1960 and has been added to twice. Due to the need for more space, the Company has recently expanded its facilities by purchasing a two-bay structure on King's Alley between Ponder Avenue and Prettyman Avenue.

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The number of fire calls has grown from 164 in 1998 to 255 in 2003, a 64% increase in five years. There are between 550 and 600 ambulance calls annually, a number which is rapidly increasing.

The Company responds to an average of one to three major fire calls per month. Lack of a public water supply system within the service area, increases in traffic on DuPont Boulevard (US 113), the Ellendale-Milton Highway (DE Route 16) and the Coastal Highway (DE Route 1), maintaining volunteer levels of service by participating volunteers who are not paid, and stability of future funding are major issues.

Future needs include the creation of additional office space through partition of the Assembly Room, addition of a sprinkler system, addition of an exhaust removal system to the Firehall, facilities for overnight stay and addition of an exercise room.

The Company is currently examining data for company responses and growth in the Cedar Creek area to determine if an additional fire station in that area is needed and feasible. A major concern of the Company is future population and real estate growth in the district, one of the largest in Delaware, and the limited supply of water within it.

H. Development Activity

The construction of facilities for the Ellendale Sanitary Sewer District has been the largest development project in the Town and surrounding community in recent years. In addition to the wastewater facilities, the project has also dovetailed with extensive housing renovation, sidewalk construction and street repaving. These projects will continue for several years.

Tables 25 and 26 show building permits issued by Sussex County in the Town of Ellendale between 1996 and 2002 by dollar value as indicated on permit applications and by the following building types: residential additions, residential remodeling projects, new dwellings and commercial/industrial projects.

Table 25
The 2004 Greater Ellendale Comprehensive Plan
Town of Ellendale Residential Building Permits Issued During 1996-2004

<i>Year</i>	<i>New Dwellings</i>	<i>\$ Value</i>	<i>Res. Additions</i>	<i>\$ Value</i>	<i>Remodellings</i>	<i>\$ Value</i>
1995	1	54,200			5	29,793
1996	1	65,400	2	7,200	3	9,500
1997	1	59,480			1	5,816
1998			2	8,412	2	11,060
1999			3	9,114	3	7,300
2000					5	19,364
2001			2	39,494	2	33,000

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2002					3	35,290
2003			3	74,318		
2004	1	140,664	1	26,016	2	12,100
Totals	4	310,744	13	74,318	26	163,223

Source: Sussex County Data Processing

Table 26
The 2004 Greater Ellendale Comprehensive Plan
Town of Ellendale Commercial Building Permits Issued During 1996-2004

Year	Commercial/Industrial	\$ Value
1997	1	140,000
1999	2	122,880
Totals	3	262,880

Source: Sussex County Data Processing

Within the Town of Ellendale during 10-year period between 1995 and 2004, Sussex County issued 4 new dwelling permits, 13 residential addition permits, 26 remodelling permits and 2 commercial/industrial permits. The data for 2004 is only for part of the year, but it appears that 2004 under any circumstances will be a relatively major year for building permits within the Town.

Mount Zion AME Church is now building a new parsonage adjacent to the church. The New Hope Recreation and Development Center is preparing to construct a new community center building attached to the existing center. Mount Zion AME Church also plans a housing for the elderly project west of the church building. The Philadelphia Pentecostal Holiness Church on South Old State Road is preparing to build 14 new townhouses on a site to the west of the existing church and educational building complex.

US Route 113 Real Estate Activity

Area landowners and real estate professionals report significant pre-development activity along the US Route 113 frontage north and south of Route 16 and in the area between 113 and 213. The US 113/Route 16 intersection is 3,000 feet west of the Current Town Boundary along Old State Road (SR 213).

Area real estate professionals report that a real estate sale contract has been executed for an 8-acre tract at the southwest corner of 113 and 16. The site is presently zoned Agricultural Residential (A-R-1) by Sussex County. It would need to be rezoned to Commercial to permit this use. The proposed use is a Gasoline Station and Convenience Mini-Market, either a Wa-wa or Royal Farms, plus several additional units of small-scale commercial space. The developer has proposed curb cut access along the site's US 113 frontage. The State of Delaware has indicated that the only curb cut access it would permit is along the DE Route 16 frontage of the site. The Sussex County Ellendale Sewer District allows very limited service (24 EDU's) to this site. The recently released DelDOT Preliminary Alternative for remaking US 113 into a Limited Access Highway

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shows this site with no direct access from either US 113 or Delaware Route 16. In fact, the alternative shows a widening of the US 113 right-of-way to the west, which would reduce the size of the site.

Integrity Associates L.L.C. has written to the Town of Ellendale describing its desire to develop a neotraditional-styled Mixed-Use development on three large parcels along the west side of US 113 both north and south of Route 16. The site includes 270 acres, 85 acres south of Route 16 and 185 acres north of 16. An average residential density of 5 units per acre is envisioned. This would result in a total of approximately 1,350 dwelling units. If the average household size were 2.5 persons, the development would have a residential population of approximately 3,375 persons, or ten times the present size of the Town of Ellendale. The development build-out period is estimated at 5-7 years. Integrity Associates has said that it would proceed with the proposed development only if the 270-acre site could be annexed into the Town of Ellendale and provided with public sewer and water. The Sussex County Ellendale Sanitary Sewer District extends as far west as the northwest corner of US 113 and DE Route 16, where it serves the existing De-Lux Market and service station. The Greater Ellendale Public Water System Feasibility Analysis completed for the Comprehensive Plan estimates that implementing a public water system would require 5-7 years. The 280-acre site in question is shown as a Low Density Area in the Sussex County Comprehensive Plan. It is now zoned AR-1 under the Sussex County Zoning Ordinance. The Developer has requested a period of 18 months in which to complete its pre-development studies. Integrity Associates has indicated that it wishes to develop the site according to the standards of the Livable Delaware program. However, the State of Delaware approved a new 2004 State Strategies for Policies and Spending (SSPS) document on September 23, 2004. Under the updated State Strategies Map, the Director of the Office of State Planning Coordination and the State Secretary of Agriculture have indicated to Integrity Associates that the State will not certify a Greater Ellendale Comprehensive Plan which shows this site within the plan's Potential Growth and Annexation Area. The State's desire is that this land should remain in agricultural use. The State's PLUS Review letter to Ellendale of September 3, 2004 (PLUS 2004-08-16 / Ellendale Comprehensive Plan) states that “. . . (state) certification of the Ellendale Comprehensive Plan will not indicate an endorsement of this development or annexation of this area. The State will not support any annexation in this area, as it is inconsistent with the County's comprehensive plan and the State Strategies.”

Between Routes 113 and 213, landowners report increasing expressions of interest from developers for single-family residential and mixed-use development.

South of Route 16 and east of 113, two large parcels between Sharon's Road, Wild Cherry Road and Out Home Road are being actively marketed for residential development.

On the east side of Old State Road, three new houses are under construction opposite Out Home Road.

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I. Marketing, Promotion and Special Events

Heretofore, Ellendale has not been active in area tourism. However, it has outstanding potentials for contributing to Southern Delaware tourism. In addition, by virtue of its location at US 113 and Delaware Route 16, it is a powerful Gateway to attractions to the east. The Comprehensive Plan identifies these potentials and Gateway linkages as follows. Also, the proposed Delaware Bay Estuary National Heritage Area offers a framework for defining Ellendale's role in heritage and ecotourism in Delaware.

Ellendale Area Attractions and Events, Current and Potential

- ☐ The Ellendale and Redden State Forests.
- ☐ Hiking and Kayaking Between the Bays
- ☐ Railroad Village Heritage
- ☐ Railroad Square as a Tourist Destination
- ☐ An Ellendale Museum
- ☐ Agri-Tourism in the Countryside
- ☐ Potential Camping Area
- ☐ Queen Anne's Greenway Trail Potential

A sampling of regional attractions and events for which Ellendale could serve as a Gateway include:

The Georgetown Area

Elsie Williams Doll Collection

This exhibit of hundreds of dolls from the Elsie Steele Williams Collection, wife of U.S. Senator John J. Williams, is valued at more than \$80,000, and includes famous dolls such as Effanbee, Madam Alexander, Bru and Suzanne Gibson. Located at Delaware Technical and Community College Library, Route 18, Georgetown. Open weekdays 10 a.m. to 10 p.m., and Fridays 10 a.m. to 4 p.m. Free admission. 302-856-5400.

Georgetown Train Station

Recently renovated, this historic train station dates back to the late 1860's. Now it is serving as a museum dedicated to transportation and contains photos and pieces relating to the history of the town and train transportation in the State of Delaware. Located on 140 Layton Avenue in the town of Georgetown. For information on hours of operation, call 302-855-5750.

The Marvel Carriage Museum

A collection of local structures, including barns, a school, church, and blacksmith shop, is the setting for a display of memorabilia and photographs of old Georgetown and Sussex County. Twenty antique horse-drawn carriages, assembled by Mr. Marvel and donated to

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the Town of Georgetown after his death in 1988, are on display. The museum is operated by the Georgetown Historical Society. Located on South Bedford Street, about 1 mile south of The Circle. Open for tours the first Sunday of each month from 1 to 4 p.m. 302-855-9660.

The Circle

The "town square" of Georgetown is listed on the National Historic Register. The Circle hosts an event unique in the nation-Return Day, held every two years on the Thursday following Election Day. Notable historic structures here include the red brick Greek Revival Courthouse facing The Circle and the original wood framed Courthouse nearby. Renovations to park and fountains, centrally located within The Circle, are currently underway. The Circle is located along Route 9 through Georgetown.

Treasures of the Sea Exhibit

See splendid treasures and a video presentation about the Atocha, a Spanish galleon that sank in 1622 off the Florida Keys. Gold and silver bars from the wreck are on display, along with a cannon, jewels, and other treasures. The gift shop features maritime memorabilia and children's gifts. Located at Delaware Technical and Community College, Route 18, Georgetown. Usually open Mondays and Tuesdays 10 a.m. to 4 p.m.; Fridays noon to 4 p.m.; and Saturdays 9 a.m. to 1 p.m. Admission is \$2 adults; \$1 senior citizens and students. Group tours are welcome. 302-856-5700.

Trees of the States Arboretum

Originated in 1976 during the bicentennial celebration, the "Trees of the States" exhibit is a self-guided walking tour of the official state tree from each of the United States. Each tree is identified with a marker noting its scientific classification and state of origin. A walking tour brochure is available. Located on the campus of Delaware Technical and Community College, Route 18, Georgetown. Open during regular college hours. Free admission. Call for Group Tour information. 302-856-5400.

World War II Aviation Museum

Located at the Sussex County Airport, this museum will showcase warplanes from World War II. For more information, call the Sussex County Airport, 302-855-2355

Nanticoke River Ecotours

A relaxing boat tour on the Nanticoke River departs from Vienna, Maryland at 10 a.m. and returns at the end of the day. It passes the historic Woodland Ferry, along with river towns in Maryland. Its mid-day destination is the town of Bethel, Delaware, on the National Historic Register. Lunch is on your own at the General Store deli. Learn the history of the design and construction of the Chesapeake Ram Schooners here, 410-522-4214.

Cape Henlopen State Park

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Where the Delaware Bay meets the Atlantic Ocean, Delaware's largest state park features public swimming beaches and bathhouses, a fishing pier, nature trails, camping, bird watching, a World War II observation tower, and the Seaside Nature Center's educational programs, saltwater aquariums and displays. Located at the end of Cape Henlopen Drive, past the Lewes Ferry terminal. Open daily 8 a.m. to sunset. Entrance fee May through October, annual vehicle permits available. 302-64508983.

Cape May Lewes Ferry

This 70-minute auto and passenger ferry ride takes travelers across the Delaware Bay between Lewes, Delaware and Cape May, New Jersey. Celebrating 33 years of history, the ferry service is undergoing extensive renovations to its fleet of five vessels. Dinner cruises, a restaurant, kids area, game room, and lounges are available on the latest renovation, the MV Twin Capes. 800-64-FERRY.

Fisher-Martin House

This historic wood-shingled structure houses the Lewes Chamber of Commerce and Visitors Center. Circa 1730, the charming gambrel-roofed house was moved from the countryside at Coolspring in 1980 as part of the 350th anniversary celebration of Lewes' legacy as the first European settlement in Delaware. Located on Kings Highway, behind the Zwaanendael Museum. Open weekdays and weekends during summer. Free admission. 302-645-8073.

Lighthouses

The Breakwater Light off the coast of Cape Henlopen was commissioned in 1828 by President John Quincy Adams, but decommissioned in 1994. The Harbor of Refuge Lighthouse, farther from shore, was built in 1901 as the final phase of the outer breakwater. This beacon is the only lighthouse off Delaware's coast that still operates. The lights can best be seen from Cape Henlopen State Park or the Cape May-Lewes Ferry.

Lewes Harbor

Perhaps one of the most picturesque spots in Southern Delaware, this area of the Lewes and Rehoboth Canal has been painted by many artists throughout the years. It is home to numerous pleasure boats, plus a fleet of head boats and charter boats offering fishing and sightseeing excursions. The harbor is home to Adams Wharf, Angler's Fishing Center, Fisherman's Wharf and Lewes Harbor Marina. A public boat ramp provides access to the Lewes-Rehoboth Canal and the Delaware Bay. Located at the drawbridge on Savannah Road.

Lewes Terminal Green Market

Gotta have the freshly-picked sugar corn, homegrown in Delaware? You can choose the First State's finest product at the summer farmer's market at the Cape May-Lewes Ferry Terminal, or Cape Henlopen Drive east of Lewes. A cooperative effort between the

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Delaware River and Bay Authority and Department of Agriculture. Open early July through Labor Day weekend, noon-6 p.m. Closed Mondays and Tuesdays. 800-282-8685.

Lewes Historical Complex

This impressive Historic Complex highlights the Burton-Ingram House, Hiram Rodney Burton House, Cannonball House Marine Museum, Doctor's Office, Early Plank House, Blacksmith's Shop, Ellegood House, Rabbit's Ferry House, Lewes Life-Saving Station Boathouse, Thompson Country Store and the Ryves Holt House. The Ryves Holt House is the oldest house in Delaware, c. 1665, still standing on its original location. Walking tours of the historic complex begin at the Ryves Holt House, at Second and Mulberry Streets. Open Monday through Saturday during summer. Walking Tours of Lewes (\$5) and Cemetery Tours (\$3) offered May through October. Admission to the 12 museums is \$6, children under 12, free. Group tours are welcome (group reservations required). 302-645-7670. tours@historiclewes.org.

Nassau Valley Vineyards

This working vineyard offers a self-guided tour in the winery's three galleries featuring the history of wine making, plus wine tasting programs and a well-stocked gift shop. Located in Nassau west of Lewes, off Route 9 or Route One. Groups welcome, but call ahead for group tour arrangements. 302-645-WINE.

Cape Henlopen State Park

Learn all about the ocean and the special creatures that live there. The campus of the Marine Studies Complex is host to a major annual fall event, Coast Day, which celebrates local marine ecology. The Virden Center, offering meeting space for overnight retreats, is also located on campus. The Graduate College of Marine Studies and Sea Grant College Program in Lewes offer free tours on Fridays during June, July and August at 10 a.m. Please call prior to Friday to reserve your space. Tours are not suitable to children under 10 years of age. Group tours are welcome, but must be pre-arranged a week in advance. 302-645-4346.

World War II Observation Tower

One of the tall WWII-era concrete observation towers, familiar along Delaware's coast, has been renovated and opened to the public at Cape Henlopen State Park. From the top, you can see much of the area's Delaware Bay and Atlantic Ocean coastline, and on a clear day, Cape May, New Jersey. Open during state park hours, free admission with park entrance fee. 302-645-8983.

Zwaanendael Museum

This unique museum is housed in a replica of the City Hall of Hoorn, the Netherlands. The building was dedicated in 1931 to commemorate the 300th anniversary of the first European (Dutch) settlement in Delaware, which was originally named Zwaanendael, but is now known as Lewes. Seafaring artifacts are on display, including those from the famed DeBraak, which sank off the Delaware coast. Located at Kings Highway and

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Savannah Road, in the heart of Lewes. Open Tuesdays through Saturdays 10 a.m. to 4:30 p.m., and Sundays 1:30 to 4:30 p.m. Group tours welcome, but call ahead for guide services. Admission is free, donations welcome. 302-645-1148.

Milford Area

Abbott's Mill Nature Center

Home of the Delaware Nature Society, this environmental education complex is clustered around a preserved gristmill that is listed on the National Register of Historic Places. The complex includes two modern nature center buildings, a barn, a nature trail with observation tower, and a boat ramp on Abbott's Pond. Facilities are available for community use and retreats. Located on Sussex Route 620, south of Route 36 near Milford. Open Monday through Friday. Tours are free, but programs are by fee. 302-422-0847.

Downtown Farmer's Market

Treat yourself to delicious fresh local product. The market operates Saturdays 9 a.m. - 1 p.m. during the harvest season, in Mispillion Riverwalk Park along Walnut Street. Sponsored by Downtown Milford, Inc. 302-422-1108.

Freshwater Ponds in Milford

Abbott's Pond, Blair's Pond, Griffith Lake, and Haven Lake provide hours of fishing, boating or simply relaxing. Enjoy a picnic and take in the cool breezes with the family. Freshwater fishing license required in Delaware for those over 16. [Delaware Division of Fish & Wildlife](#), 302-739-3441.

Milford Museum

Housed in a former post office building, the museum's permanent exhibits tell the story of the city from its earliest beginnings on the Mispillion River. Exhibits include model ships representing Milford's maritime past, a 300 piece silver collection, antique dental tools from the local L. D. Caulk Company, and an antique doll collection. The museum also houses the E. Millis Hurley Library, an extensive collection of Delaware history books. Located on Walnut Street in downtown Milford, via Route 14 (N.E. Front Street) between US 113 and Route 1. Open Saturdays and Sundays, 2 to 4 p.m. Closed during August and major holidays. Admission is free, but donations are welcome. Group tours available, 302-424-1080 or 302-422-2187.

Milford's Historic Area

Milford is graced with three historic districts on the National Register and three historic bed and breakfast inns. The town's architecture is delightful, especially along the streets surrounding the heart of the downtown area at Walnut Street and the Mispillion River.

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Mispillion Lighthouse

Commissioned in 1831, this privately owned structure now sits abandoned overlooking the Mispillion River Inlet and Delaware Bay. From 36 east of Milford, turn left at the bridge in Slaughter Beach. The lighthouse is at the end of the road, past the public boat ramp.

Parson Thorne Mansion

Built in 1730s, the mansion's unusual architecture progressed from a settler's dwelling to Georgian to Victorian in style. The home has always held a prominent position in Milford's history, once overlooking shipbuilding and milling activities on the river. The mansion was home to several famous figures, most notably its namesake Parson Sydenham Thorne, Milford's founder. Located on N. W. Front Street (Route 14), just east of Route 113. Open weekends, May through October. Admission is \$2 per person. Group tours are welcome. 302-422-3115.

Riverfront Theatre

Located on Walnut Street at the Mispillion River, the theatre is the home of a local performing arts group, the Second Street Players. Call for tickets and performance schedules. 302-422-0220.

Slaughter Beach

This fishing village on the shore of the Delaware Bay features several public boat ramps and public beach facilities. 302-422-3344. Freshwater fishing license required in Delaware for those over 16. [Delaware Division of Fish & Wildlife](#), 302-739-3441.

Nanticoke Indian Museum

The museum features artifacts and exhibits that tell the rich history of the Delaware Nanticoke Indian Tribe and others nationwide, with an extensive Native American library. The community holds its annual two-day Powwow in September, with ceremonial dancing and music, storytelling, Native American crafts and food. Located at Routes 24 and 5, east of Millsboro near the village of Oak Orchard. Summer season hours are Tuesday through Friday 9 a.m. - 4 p.m.; Saturdays 10 a.m. - 4 p.m.; Sundays noon to 4 p.m. Winter hours are Tuesday thru Thursday 9 a.m. - 4 p.m., and Saturdays noon to 4 p.m. Admission is \$1 for adults and \$.50 for children. Group tours are welcome. 302-945-7022.

Milton Area

Broadkill River Canoe Trail

The tidal Broadkill River provides a gentle canoe trail between Memorial Park in Milton and the Nature Conservancy's McCabe Preserve. The preserve offers a landing spot on shore and a hiking trail for enjoying the native flora and fauna. The canoe trail is a joint venture of the Town of Milton and The Nature Conservancy's Delaware Chapter. Canoe

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rental is available from Wilson's Marina on Front Street in Milton, or bring your own boat. 302-684-3425.

Dogfish Head Craft Brewery

This nationally known brewery offers guided tours of the "made by hand" beer brewing facility. Tours take place every Friday at 3pm. You will explore the steps of the beer brewing process and see the grain silo, fermenting tank, ice boiler and bottling tank. A gift store on-site features Dogfish Head products. Visit them at their new Milton location at #6 Cannery Village Center, 888-8-DOGFISH.

Edward McCabe Preserve and Greenway Trail

143-acre refuge maintained by the Nature Conservancy, featuring native flora and fauna, including rare plants and migratory birds. A variety of distinct habitats are represented including upland forest, tidal marsh and swamp forests. A two-mile canoe trail links nature preserves to the historic town of Milton. Open daily from dawn to dusk, 302-369-4143.

Governor's Walk Greenway

A brick path, linking Wagamon's Pond to Memorial Park along the Broadkill River, commemorates Milton as the hometown of five former governors. 302-684-1101.

Hollyberry Orchid Farm

This family-owned and operated orchid farm retails orchids year-round. Tours are available, in conjunction with the Manor at Cool Spring Lavender Farm on Sundays and Wednesdays, with reservations. Located off Route 5, on County Route 293 near Harbeson.

Lydia B. Cannon Museum

Exhibits include Milton's early years, a doctor's office, early ship building tools and records, a button press (saluting Milton's significance in the button-making industry) and many historical photographs and artifacts chronicling the town's history. The museum is housed in a former church, with colorful stained glass windows. Located on Union Street in downtown Milton. Free admission. 302-684-1101 or 302-684-8676.

Milton Equestrian Center

Day camps for children and adults are available during the summer. Participants learn horsemanship skills, horse care, stable management, veterinary and farrier information, and more. Some overnight camps are also offered. Located on route 5, north of Milton. 302-684-1818.

Milton Memorial Park

This lovely park along the Broadkill River offers a family atmosphere, with picnic tables and pavilion, a miniature train ride for kids (on summer weekends), public boat launch, and handicapped accessible fishing pier. Various festivals, such as Bargain\$ on the

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Broadkill, are held here each year. Located just off Union Street, behind the Milton Public Library.

Milton's Historic District

Milton's historic district contains 198 buildings on the National Register, featuring fine examples of Victorian and other architecture including former Delaware governors' home. Governor's Day is celebrated every two years in September with a selection of homes open to the public. 302-684-1101.

Pine Hollow Christmas Tree Farm

This nine-acre tree farm offers a mile-long wooded path and year-round bed and breakfast inn. Located between Milton and Lewes. 302-644-0711.

Prime Hook National Wildlife Refuge and Visitors Center

Established in the 1960s, the 8,800-acre refuge provides nature trails, bird and wildlife watching, and ponds for canoeing and boating. Hunters and anglers find hours of quiet solitude in season, within close proximity to Milton. Prime Hook is located on Route 16, just east of Route 1, on the way to Broadkill Beach. The Refuge is open daily, 30 minutes before sunrise until 30 minutes after sunset, year-round. The Visitors Center is open 7:30 a.m. to 4 p.m. Monday through Friday, free of charge. 302-684-8419.

J. Land Conservation

The Delaware Department of Agriculture, DNREC, the Sussex Land Trust and The Nature Conservancy are all active in the conservation of natural resource lands in The Greater Ellendale area. The following is a description of The Nature Conservancy's just completed acquisition of The Ponder Tract one mile east of The Study Area.

"We have the opportunity to significantly advance conservation of Delaware's dwindling forestland. Glatfelter Pulp Wood Company, Delaware's largest private landowner, is divesting as many as 2,800 acres in Delaware through a series of sealed bid sales. Much of this acreage falls within one of the largest forested areas remaining on the Delmarva Peninsula today – the Redden/Ellendale Forest, located within the Chesapeake-Delaware Bay Conservation Corridor in the heart of Sussex County. The Nature Conservancy has committed to purchase the Ponders tract – 908 acres adjacent to our Pemberton Branch preserve and a critical piece of the Redden/Ellendale Forest, one of the four most densely forested areas in the state.

In 2003, Glatfelter placed more than 2,800 acres in Delaware for sale on the public market. In March 2004, The Nature Conservancy purchased one of the Glatfelter tracts located in the Redden/Ellendale area – the Ponders tract. This 900+ acre tract is adjacent to the Conservancy's Pemberton Branch Preserve, where we have protected more than 450 acres.

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The Redden/Ellendale area is significant to the Mid-Atlantic region's biodiversity, according to a recently completed study by The Nature Conservancy that identified priority habitats and areas for protection in Delaware. Native coastal forest complexes were selected as conservation goals and the Redden/Ellendale area is one of the best remaining forests in the state. Twenty-six percent of the area is already under some form of protection from extensive development – Redden State Forest, Delaware's largest state forest totaling almost 10,000 acres, characterizes this rural area dominated by privately-owned working forests and farms mixed with significant natural resources.

Loblolly pine is the primary tree species in the forest, although Redden/Ellendale is also home to a number of mixed hardwoods, including a variety of oaks, hickory and tulip poplar, as well as important stands of Atlantic white cedar, a declining and uncommon forest type. Because of its forested character, the Redden/Ellendale area serves as a natural filtering system for groundwater, protecting and maintaining the integrity the tributaries flowing westward and southward to the Chesapeake Bay as well as numerous tributaries that flow eastward and northward into the Delaware Bay. In fact, Redden/Ellendale is home to the headwaters for the Broadkill and the Nanticoke River, two of Sussex County's premier tidal rivers. This territory supports diverse animal and plant communities, including seven globally rare plant species, one federally endangered plant species, and four state endangered bird species.

Unbroken forested areas are of particular importance to birds. In this part of Delaware, red-shouldered hawks circle over the tops of trees, while yellow-throated warblers and northern parulas nest snugly in the branches. As an integral stop along the Atlantic Flyway, Delaware's forested land is precious to migrating birds – and also becoming more difficult for them to find. In addition, many species of songbirds - such as the cerulean warbler and American redstart - require large contiguous tracts of forest with adequate interior forest for breeding purposes.

Our ecological objective is to restore a native mature mixed forest on the property through reforestation and timber management. Restored forest cover, combined with the well-drained soils on the site, will create suitable environmental conditions for a wide variety of forest species, such as tulip poplar, hickory, mountain laurel and highbush blueberry. A \$1.5 million stewardship endowment fund will be established to ensure future management requirements and needs for the property are fulfilled. After its conservation needs are met, it is our hope to share this restored hardwood forest with the local community in a manner that is appropriate to maintain natural values. For the foreseeable future, managed hunting for deer will be necessary for ecological management and forest sustainability.

The Nature Conservancy in Delaware has already secured important public financial support for protection of Glatfelter forestland. Federal and state funds totaling \$4.6 million will allow the Delaware Department of Agriculture to purchase a conservation easement on the Ponders property from The Nature Conservancy. Support for the project

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includes nearly \$2 million in U.S. Department of Agriculture (USDA) Forest Legacy Program funds, more than \$600,000 in state Open Space funding, and an additional \$2 million commitment from the State of Delaware. The conservation easement will be monitored by the Delaware Forest Service.

As a result of our efforts to engage the local community in our conservation efforts, the Sussex County Land Trust has approved a \$1 million contribution toward our efforts to purchase the Ponders. Also, one of the Ponders tract's adjoining landowners has initiated a fundraising campaign among his friends and neighbors, many of whom are new to the Conservancy, to assist us in garnering necessary funds for this acquisition. Looking forward, the Conservancy continues to talk with individual conservation leaders about this important project and asking for their consideration and support for this unique opportunity in forest conservation. All partners in this project will be acknowledged in all appropriate communications about the project and signage at the site.

The Redden/Ellendale area is one of the largest forested wetland areas in the state, providing cleaner water, cleaner air and important habitat for numerous species, including humans. We now have an opportunity to protect Delaware's *green horizons* – wide expanses of forested land in the heart of Sussex County – at a large and sustainable scale for biodiversity.”

❑ **Agricultural Land Preservation**

There are two primary programs for farmland preservation in Delaware. Both programs are voluntary. In the Agricultural Districts program farmers enter into 10-year agreements to keep their lands in farming use and in return receive lower assessments for real estate tax purposes. In the Delaware Agricultural Lands Preservation Foundation program, permanent easements are created by the sale of development rights to the State.

As of June 2004, application has been made to include the first tracts of Greater Ellendale Area farmland in the Delaware Agricultural Land Preservation program. The tracts are known as The Houseman Tracts, comprise approximately 932 acres of farmland, and are located to the north and northeast of the Town. The Houseman Tracts Agricultural Preservation District is shown in the map by that title.

The Delaware Agricultural Lands Preservation Program was formed with the adoption of House Bill 200 in July 1991.

Participation in the program is voluntary and has two components. First, landowners join the program by creating an Agricultural Preservation District. An Agricultural Preservation District contains at least 200 contiguous acres that are devoted to agricultural and related uses. Any lands less than 200 usable and contiguous acres within three miles of an established district can be enrolled in the program as a District Expansion.

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Landowners who place their lands in an Agricultural Preservation District agree not to develop their lands for at least 10 years, devoting it only to agriculture and related uses. In return, the owners receive tax benefits, right-to-farm protection and an opportunity to sell a preservation easement to the state that keeps the land free from development permanently.

High quality soils, significant agricultural infrastructure and historical and environmental significance are all factors considered in the selection of farmland for permanent preservation. Many of these farms are contiguous to already protected land and complement the State's open space preservation efforts by creating natural buffers between development and public open space. Thus far, the program has been successful in striking a balance between two important goals:

- a. Preserving a critical mass of crop land, forest land, and open space to sustain Delaware's number one industry and quality of life, and
- b. Providing landowners an opportunity to preserve their land in the face of increasing development pressures and decreasing commodity values.

With landowners volunteering to sell preservation easements at an average of 51 percent below appraised value, the Foundation estimates that \$50 Million may purchase easements on all of the farms of landowners currently seeking permanent preservation of their land. This is unheard of anywhere in the nation for a program of this nature. Yet, Delaware is in a position to accomplish this goal. Continued funding of the Program increases the desire for landowners to place their land into agricultural preservation districts in favor of rezoning or subdividing for non-agricultural purposes. This activity, combined with the current permanent preservation of Delaware's farms at a modest cost of \$1,039 per acre, is viewed as a true bargain for the State's taxpayers of today and a wise investment for the generations to come.

As of June 2004, the program includes 557 districts including 133,992 acres, and 413 easements including 77,087 acres.

The Delaware Agricultural Land Preservation Program is stronger than ever before in terms of funding and interest. There appear to be opportunity for participation by Greater Ellendale Area farms in future rounds of the PDR program.

Transfer of Development Rights (TDR) via County and Town Zoning Ordinances is an additional tool for farmland preservation. Under TDR, a developer interested in obtaining additional development rights for use on an urban site purchases unused rights from a farmland or natural resource landowner who does not need them. The method requires that the County in question establish "sending zones" in its Zoning Ordinance and the receiving municipality establish corresponding "receiving zones".

The State of Delaware adopted a law authorizing the use of TDR in 2002. At the present time, the TDR method is being used by Kent County and the Town of Middletown to

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assist a development project on the west side of Middletown. The Town of Middletown will hold the easement acquired from the farmland owner. The development project is expected to go into construction in the Fall of 2004. This will be the first use of TDR method in Delaware. This may be a method, which could be useful in Ellendale.

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VI. Comprehensive Plan: Goals, Policies & Projects

The purpose in having a Comprehensive Plan is to enable more good things to happen than could otherwise be possible. By having and using a Comprehensive Plan, a community can maximize its limited resources. It can achieve greater consensus within itself. It can form partnerships with other groups, including ones with greater resources. The 2004 Greater Ellendale Comprehensive Plan is a long-term plan, 20 years in this case, because patient periods of time are required to identify, combine and leverage resources. The creation of an economically mixed and viable Town Center is an example. It must be slowly pieced together based on trial and error. Developing design and activity patterns that can interconnect the existing incorporated area of the Town with US Route 113, the DuPont Boulevard, 3,500 feet to its west is another.

A major planning and economic development challenge for Ellendale is to institute planning and zoning based on the Comprehensive Plan. It is important that the Comprehensive Plan be the subject of community discussion and collaboration with county and state agencies.

It is also important that the plan contain a vision that makes sense to the citizens of the community. Because implementing a Comprehensive Plan requires contributions by hundreds of people, it must contain a vision that can be shared. The following vision statement has been prepared for the Greater Ellendale Comprehensive Plan:

A. A Vision of Ellendale

Based on community reconnaissance, discussion with the Town Council and community leaders, the public meeting held in the Fire Hall on December 16th, research into technical aspects and discussion with Sussex County and the State of Delaware about the 2003 Sussex County Comprehensive Plan Update and the Livable Delaware Program, the following draft vision statement and goals are recommended for The 2004 Greater Ellendale Area Comprehensive Plan.

A Small Jewel within Delaware

“Ellendale Should Look Like Ellendale.”

□ Lawrence G. Houseman, Ellendale

Ellendale is a Town of the Forest and a Bridge between two Bays. It is a unique Gateway connecting Town, Forest, Farmlands, the Nanticoke River and Delaware Bay Watersheds and the Beaches of Delaware. Our vision of Ellendale is that it is a small town with unique people and character. It has a special history as a Railroad Village in the forests and farmlands of Sussex County and Southern Delaware. In the future, Ellendale will

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continue to look and feel like it has in the past, while benefiting from the best qualities of healthy growth. The Ellendale and Redden State Forests will be protected and expanded. The Ellendale Swamp will be conserved for future generations. A new Greenway “Rail with Trail” will be developed along the Queen Anne’s Railway Line between Ellendale’s Railroad Square and Milton’s Cannery Village, becoming part of The American Discovery Trail.

Ellendale is a small jewel within Delaware, which Thomas Jefferson described as “a jewel among the States”. It has the “inherent value” which the Milford Bard John Lofland wrote about when he said that “Delaware is like a diamond, diminutive, but having within it inherent value”.

Ellendale is centered on a historic railroad junction in the forest and the equally historic railroad-era village that grew up around it. It includes vital community institutions, centers of worship and places within the Town and along Old State Road, at the hamlets of New Hope and New Market and along surrounding country roads. It encompasses countryside of great beauty and heritage, including the forests of Ellendale and Redden, the Ellendale Swamp and prime farmlands.

It is special because the area and village comprise a land bridge and “northeast passage” between the Maple and Gravelly Branches, tributaries that flow to the southwest into the Nanticoke River and Chesapeake Bay, and the Sowbridge and Church Branches, which flow to the east into Cedar Creek and the Broadkill River and then into the Delaware Bay Estuary. Ellendale is a land bridge, a natural divide and a path between two bays.

The Greater Ellendale community is also touched by the new Atlantic-to-Pacific “American Discovery Trail”, an east-west transcontinental trail only first inaugurated in 2000. Envisioned as an east-west Appalachian Trail, the American Discovery Trail has enormous potential for the future as well as great potential in combination with Ellendale.

As a traffic gateway from the Chesapeake Bay Bridge to the beaches of Delaware Bay, more than a million people traverse Ellendale each year along DE Route 16, the “Beach Highway”.

The main traffic artery of Ellendale, US Route 113 – The DuPont Highway, is growing in use and importance as a major Delmarva north-south highway connecting New York and Norfolk. The County and state have agreed to further enhance this importance.

Ellendale loves its country life, close to forest and stream and hunting and fishing. It wishes to preserve its historic and rural character and progressively develop new facilities and services to ensure its future. It is recognized that growth is occurring and will probably accelerate as a result of geography and transportation.

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Ellendale's vision encompasses the preservation of its architectural treasures, conservation of irreplaceable land, water and habitat resources, and planned, well-designed new community development.

Ellendale can be a working model of the Livable Delaware program, which in turn can bring new resources for community development. Livable Delaware considers all aspects of community growth and conservation: town center, suburban, rural and highway. It also considers both community design and scale and the fiscal and service implications of development. It is acknowledged that the community and Livable Delaware will evolve in both planned and spontaneous ways.

In this manner, and in the spirit of Thomas Jefferson and John Lofland, the jewel that Ellendale is, within the Diamond of Delaware, can be polished and developed for future generations.

B. Regional Location

Goal: To develop a Comprehensive Plan which builds upon the most valuable assets of Ellendale's regional location and uses them to bring benefit to the local community.

Ellendale occupies an increasingly strategic regional location in the State of Delaware. It is at the crossing point of the Junction and Breakwater and Queen Anne's Railway lines, the former actively used by the Norfolk and Southern Railroad, the later partially used for freight car storage between Ellendale to Milton.

It is also at the regionally important intersection of US Route 113 (the DuPont Boulevard), Delaware Route 16 (Main Street and Beach Highway), and Delaware 213 (Old State Road).

Growing volumes of residential, business, commuter and tourist traffic traverse it seasonally and daily.

Sussex County is growing at a very rapid rate, currently at some 3% per year. A major part of the growth is retirement living. Now that the Baby Boom is entering its retirement years, it is expected that this growth will accelerate.

Ellendale is also located among farms, forests, streams, trails and greenways with great future potential for conservation and recreational use.

The village is at the crossing point of two potentially powerful and attractive Greenways – a "Northeast Passage" reaching between the Bays, which extends the reach of the Nanticoke River deep into Delaware, and an "East-West Passage" which can consist of the Queen Anne's Railway and the American Discovery Trail from Lewes to the Maryland Line.

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C. Community Design

Goal: In each component of the Comprehensive Plan, to respect the community's small town, forested, green and rural Sussex County character.

As one Ellendale community leader has said, in the future "Ellendale should look like Ellendale".

As a small town in a forest, stream and farm setting, Ellendale should grow in ways that preserve this character and feel. Growth should be accommodated but should be small or moderate in scale and density. Design should reflect the traditional styles and materials of the community.

This means that future developments should be one or two stories in height, located on tree-lined streets continuous with the streets of the village, reasonably close together, and fashioned in architectural styles that are consistent with Ellendale's past. A reasonable residential density for Ellendale is 3-4 residential units per acre. It should always be possible to walk along the streets of the village. When in Town, it should be possible to see and feel the surrounding forests and fields.

The Town of Ellendale is a historic market and residential Town at a key transportation junction in a rapidly developing area. Both land conservation and design goals for development are addressed in the Comprehensive Plan. The following unique assets of Ellendale have been considered:

- ❑ Ellendale is focused on an attractive Historic Area, partly inside the Town and partly adjacent to it on the west and north, along Route 16 and Old State Road, and partly to the east and northeast, along the roads leading to New Market and adjacent areas. It is a very attractive area, although one in which conditions must be addressed a new investment encouraged.
- ❑ Ellendale is a friendly community with a family-oriented style and hometown quality of life.
- ❑ It is a mixed-use community on a small scale, including residential, community organization, institutional, retail, governmental, office, and distribution functions. Its character and economy has consistently been based on a mixture of transportation and forest resources, expressed in the Plan under the theme: "Rails in the Forest".
- ❑ It is a traditional market town and crossroads of Southern Delaware. These are natural qualities with potential for attracting future businesses. There is a need to diversify with some knowledge-based small business activities, a process which has begun. There is a need for a small retail plaza and business park.
- ❑ The Area is centered on the small waterways that are headwaters to the two Bays to the East and west.

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- ❑ As an incorporated municipality, Ellendale has Town institutions, facilities, services, programs and infrastructure.
- ❑ Included in these are a Town Park, its famous forests and swamp, and the beginnings of a unique Greenway traversing the Town. It has potential for new eco- and heritage tourism that can support small-scale economic development. The Greenway should be a matter of County, State and Federal interest, as it will bring benefit to all levels of government.
- ❑ The Town has an attractive location within its regional framework of central Sussex County and Southern Delaware, a setting that includes Georgetown, Milton, Milford and the Delaware Coastal Towns.

Community design is agreement in principle about the best patterns of architecture, scale, building material, styles, landscaping and site design. These patterns are expressed in the Town Code, in the design of public improvements and in the development of residential and business areas. They are expressed in the work of private designers and developers.

The goal for community design in Ellendale is to reflect its historical character as a country village of one and two-story buildings in a setting of small, richly landscaped lots surrounded by forest and farmland.

Within the Historic Area, from one block north of Main Street south, new infill development should be “gathered” along street frontages with small setbacks from streets and sidewalks. Favored materials should be brick and clapboard. A “neighborhood” approach to design should be developed in which the design of an individual structure is related to the design of its surroundings. “Streetscape” means a “family” of such elements as street and sidewalk paving treatments, directional and place signage, special lighting fixtures, benches and street trees and other plantings. Streetscape is what people see and remember, creating the image of the community.

Two key community design principles are neotraditional design and clustering:

Neotraditional Design emphasizes a mixture of principal uses rather than only one, variation and clustering in densities, traditional street and block patterns, interior streets with smaller cartway widths, more rectilinear and continuous street patterns, streetscapes with rows of facades and porches close to the street, careful design and improvement of alleys and courtyards, continuity of sidewalks, walking trails, paths and other pedestrian-friendly ways, use of vertical curbs, planting of street trees in regular rows, more traditional block configurations, use of town squares, plazas, commons and other open spaces in a neighborhood design, zero-lot line and variegated setbacks (as in older villages), transit stops and shelters, landscaped buffers, gateway entrances and treatment of development edges. Neotraditional design emulates the traditional village development patterns of the past and is hence referred to as “neotraditional”.

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Clustering in New Subdivision Projects and Dwelling Groups: Clustering gathers together buildings on the portions of a site most appropriate for building. It leaves the other portions open and clear of buildings. The open space should occur on the portions that are not suitable for building because of natural conditions or because of natural features that should be protected or even enhanced. In Clustering, the Planning and Zoning Commission is authorized to encourage the modification of the density requirements of the Zoning Ordinance. The overall “gross” density (based on the total area of the site) still must conform to the standard set by the Zoning Ordinance, usually based on minimum lot size. However, after clustering one portion of the site will have a higher density and others a lower density or no density at all. Approval for clustering occurs at the time of Zoning, Subdivision and Site Plan Approval. Its purpose is to achieve flexibility of design in order to promote the most appropriate use of land, the economical provision of streets and utilities and protection of the natural environment. This includes the protection of excellent recharge areas.

Clustering should also be used in Ellendale as a tool to creatively address the issue of hydric soils. Where these seasonally flooded soils exist, as is the case where Pocomoke Soils are located in the area between Old State Road and US 113, clustering can be used to focus housing development in site areas least susceptible to flooding or recharge problems, leaving large areas, perhaps as much as 50% of the total site, open for natural bioswales, groundcover, tree planting, green strips and riparian buffers to help with recharge and mitigate problems associated with groundwater runoff. In implementing these designs, EPS’s Best Practices should be implemented.

The design aspects of the Comprehensive Plan are standards for building setbacks, façade treatments, landscaping and relationships to public spaces. These standards need to be carried into a Town Zoning Ordinance and, to the extent possible, be reflected in the County Zoning Ordinance. The following values are recommended:

- ☐ Within the Town Center, Historic Area, and Traditional Neighborhoods, where street patterns are part of Ellendale’s 100-year heritage, buildings should be designed to be compatible with their neighbors, setbacks from streets should be kept to a minimum and landscaping should reflect the landscaping pattern of the larger district and the natural patterns of the adjacent forest.
- ☐ Along U.S. Route 113, street tree plantings by DelDOT would be a blessing and a handsome addition to the streetscape. Trees and shrubs native to Delaware should be planted when possible. Within the Town, the Town should consider developing a Street Tree Plan for the installation and long term maintenance of street and community trees.
- ☐ The current town and community property fix-up and rehabilitation campaign should be continued and expanded as an action essential to correct long-term deterioration.
- ☐ New single-family homes and townhouses can be developed on small or large lots with attractive tree planting and landscaping. Houses should “face” the street. Garages should be oriented to side streets or rear alleys wherever possible. Sidewalks should be used

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within the Town limits. To the extent possible, houses should be two-story in height and front door entrances should be architecturally expressed with porticos, arches or gables.

- ❑ The Town Park should be enhanced and new open space created for both passive and active use with park furniture, seating areas, lighting and signage of a style consistent with the traditional design of the Town and Historic Area.
- ❑ Mature trees should be maintained and new tree and flower plantings established.
- ❑ Historic and older homes should be preserved and rehabilitated.
- ❑ Ellendale's interconnected street network is a great value and should be extended continuously into new growth areas.
- ❑ Bike paths and multi-use trails can be developed alongside major roads and through parks and public areas.
- ❑ Within the overall community, the design of new development should be carefully related to the environmental condition of being in a unique area of interconnected streams and ditches.
- ❑ The Town's "Gateways", as identified on the Framework for Future Land Use Map, should be highlighted and beautified with new landscaping, banners, sculpture and directional signage to give people a strong image of the best of Ellendale.
- ❑ The planned Ellendale Zoning Ordinance is the vehicle with which to implement many of these principles. Town Subdivision Regulations are needed to implement clustering and related conservation design practices for new subdivisions.
- ❑ The Town may wish in future years to appoint a Design Advisory Panel to provide design assistance to builders and developers and to the Town itself in the design of public improvements.

D. Future Land Use and Zoning

Goal: To accommodate a full range and diversity of land uses within the community. These should include agriculture, forests, greenways, waterways and trails, service, commercial, light industrial, low- and medium-density residential, community facilities and institutional uses.

Ellendale has had a broad variety of uses since it's founding. Locations should be chosen for future uses that have the greatest benefit for community groups and the community as a whole.

A new movement in America is to accommodate a mix of uses in planned settings, with great attention to design and community amenities.

The Livable Delaware program encourages us to think in this direction and preserve historical features, design for Mixed-Use, emphasize street tree planting and landscaping, lay out continuous streets, trail, pedestrian and bicycle paths, provide access to public transit and build residential neighborhoods at densities of 3-4 units per acre with reasonably compact lot sizes.

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The Comprehensive Plan will identify sites suited for these kinds of development, making them a major feature of the Comprehensive Plan.

The Comprehensive Plan's Future Land Use element is the guide to future development and conservation. It shall be used to create a Town of Ellendale Zoning Ordinance and related codes. It shall be used to assist Sussex County in future land use and zoning revisions within the study area. It shall serve to establish the desired Potential Growth and Annexation Boundary and Greenbelt in cooperation with Sussex County and the State of Delaware.

In order to prepare a forward-looking Future Land Use Plan for The 2004 Greater Ellendale Comprehensive Plan, the Framework for Future Land Use Analysis was used as a starting point.

The analysis began by examining the regional area of which the study area is a part. The regional area has several organizing characteristics. Its streams define its natural environment as they rise to feed the two watersheds and nourish the forests and land. This natural hinterland is illustrated on the map entitled Ellendale's Natural Resources.

The area is influenced by the presence of other urban centers that share the North-central Sussex regional area. These include Georgetown, Sussex County's capital, to the south, Milford to the north with its larger population, banking facilities and economic base, and Milton and Greenwood to the east and west, important places in the transportation network along the road to the beaches. This area is illustrated on the map entitled Ellendale's Regional Framework.

Consideration has been given to the methodology developed by Kevin Lynch in his classic The Image of the City, published by the MIT Press in 1960. Study was made of the Sussex County Comprehensive Plan Update, prepared by Shafer Consulting for the Sussex County Council and the Sussex County Planning and Zoning Commission. A review was made of the Sussex County Long-Range Transportation Plan Update of November 2001, as prepared by Kise, Straw & Kolodner as part of a cooperative effort between Sussex County and the Delaware Department of Transportation. Regarding the growth assumptions used in designing the new Sussex County Ellendale Sanitary Sewer System, the Comprehensive Planning Team consulted with the Sussex County Engineering Department. The growth assumptions contained in the Sussex County Facilities Plan and The Ellendale Sanitary Sewer District Collection and Conveyance – Design Criteria and Wastewater Flows Technical Memorandum were evaluated. The recently issued State of Delaware State Comprehensive Outdoor Recreation Plan (SCORP) was consulted. Discussions were held with knowledgeable community and real estate experts.

Consideration was also given to an analysis of future planned growth and proposed construction within the Town of Ellendale and its surrounding area prepared by the

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Comprehensive Plan Team. In part, the analysis was prepared for the purpose of sizing a potential future Public Water Supply System for the area, a major study of the Comprehensive Plan.

The following elements were defined in the Framework for Future Land Use analysis:

The Town Center, Town Park and Historic Area – The Plan proposes that the future planning view this area as focused on Railroad Square and on Willow Street as a path between the elements, including connection between Cedar Branch and Sowbridge Branch.

Gateways, or nodes, within the Town of Ellendale and Greater Ellendale Area – Nodes are defined by Kevin Lynch as “. . . points, the strategic spots in a city into which an observer can enter, and which are the intensive foci to and from which he is traveling. They can be primarily junctions, places of a break in transportation, a crossing or convergence of paths, moments of shift from one structure to another.” Gateways are identified at the interchanges of Route 113 with Route 16, Route 16 with Old state Road and Main Street with the twin Railroad Avenues. The US 113 Gateway will increasingly be the primary Gateway to Ellendale, exposing millions of people to the community each year. Many would stop and patronize community facilities if they knew what they offered.

Relationships to Other Urban Centers in the Region – The relationships to other urban centers in the Region are defined by traffic corridors like Routes 113, 213 and 16 and by the development patterns affecting these connectors. These relationships are focused along the connections made by the roadways to other attractions in the region: the Delaware Beaches travel between Milford and Georgetown and between the Wilmington/Philadelphia region and the Norfolk, Virginia Region.

Utility Infrastructure Corridors – Growth projections and flow data for the Sanitary Sewer District prepared by the Sussex County Engineering Department were evaluated. It is anticipated that there will be future utility extensions and annexation requests within or adjacent to the locations served by the Sanitary Sewer District. The Sanitary District has been used as the basis for Ellendale growth in the Sussex County Comprehensive Plan Update.

Growth Areas and Special Districts – Based on Delaware’s House Bill 255 and its definition of a planned approach to municipal annexation, a potential growth and annexation area has been defined within the Study Area. The growth and annexation area definition is consistent with practice in Delaware since the passage of HB 255. It defines an area with clusters of properties within a reasonable distance from the present Town boundary. It does not mean that the entire area indicated will be annexed. Annexation is a voluntary procedure initiated by property owners based on their own perceptions of needs.

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Within the Study Area the following areas are included within the Potential Growth and Annexation Area:

1. The area west of the present municipal boundary along Old State Road reaching from Old State Road to US 113. The projected growth area extends north to the southern boundary of the Appenzollar Tract of the Ellendale State Forest and south to Out Home Road. This area consists of residential development along Old state Road, Delaware Route 16, along Sharons Road and in Walker's Acres. The area also includes highway commercial development along the east side of Route 113. It also extends along the northern boundary of the Town as far east as the Norfolk and Southern Railroad tracks.
2. The area along the northeast and eastern boundaries of the Town within the boundary of the Ellendale and New Market Sewer District, including the long extension of the District out to the New Market Village. Existing land use in this area is for farmland and low-density single-family housing development along country roads. This area is categorized as Phase II of the Potential Growth and Annexation Area.
3. The area south of the Town and within the limits of the Sewer District along South Old State Road as far as New Hope Village. This area is categorized as Phase II of the Potential Growth and Annexation Area.

Natural Resource/Open Space – On the Future Land Use Plan, open space is grouped with agriculture and natural resource uses to present a coherent picture of the network of green space around Ellendale.

Mixed-Use Areas – Mixed-Use Areas are those in which a mixture of residential and supporting community facility, open space and commercial development is planned.

The Framework for Future Land Use shows the Town Center, Historic and Developed Area, the Norfolk and Southern and Queen Anne's (Milton Industrial Track) Railways, the Nanticoke and Delaware Bay Watersheds, Gateways to and from and within Ellendale, the Broadkill-Nanticoke Greenway, proposed Greenway Trail, growth areas, existing neighborhoods, the current municipal boundary, a Potential Growth and Annexation Boundary and the surrounding Greenbelt of forests, farms and natural resource lands. The Framework map shows the following numbered growth or conservation areas:

The Town of Ellendale is a village of predominantly residential use centered on Main Street and East and West Railroad Avenues just north of the Ellendale Swamp. It has many historic houses, mostly south of Main Street. It has a newer residential area at its northeast corner, along Ponder Avenue. It has numerous public buildings and institutions as well as a Town Park. These are gathered along Main Street and McCauley Avenue. There are two large farmland parcels located north of Main Street in the center of the

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Town. The Town has benefited from recent public improvements, many in connection with the construction of the new Ellendale and New Market Sanitary Sewer System.

The purpose of the Framework for Future Land Use map is to provide a framework of principles for the development of the future Land Use Plan. It identifies major natural and built-up areas and features of the Greater Ellendale Study Area. It shows the Town, community centers, churches, property parcels, transportation facilities, natural resources and waterways. It also shows the Peninsular Divide that demarcates the Chesapeake Bay and Delaware Bay Estuary Watersheds that meet in Ellendale. Finally it shows Gateways at three places where transportation routes come together in the community: the US 113/Delaware 16 intersection, the Old State Road/Beach Highway intersection and the Railroad Square area at Main Street and East and West Railroad Avenues. These are major places of visual prominence and traffic, where the image of Ellendale is formed for residents and visitors alike.

The framework Map identifies the Town and 10 sub-areas that are distinct in terms of land use, transportation and history. They are:

Area 1 is the Northwest Corner Of The Study Area. It is characterized by relatively high-density rural residential development along Staytonville Road, North Union Church Road and Webbs Road. There are 5 large high-quality farmland properties located between these roads and the west edge of US 113 – DuPont Boulevard. The western third of the Appenzollar Tract of The Ellendale State Forest is located at the southwest corner of Staytonville Road and US 113. Along the west edge of 113, north and south of Route 16, Integrity Associates proposes to develop 270 acres of land as a neotraditional mixed-use community. The developers have indicated their desire to have this land area annexed by the Town of Ellendale. Numerous streams and ditches rise north of Webbs Road and flow northward to Hudson Pond, Cedar Creek and Delaware Bay.

Area 2 is the Dupont Boulevard/US 113 North-South Traffic Corridor. US 113 is a four-lane north-south regional highway which connects northern Delaware, eastern Pennsylvania and, the New York City Metropolitan Area and New Jersey with the Delaware and Maryland Beaches and Virginia. It is at the center of a growing area for retirement living. As indicated in the Transportation Section, US 113 is experiencing rapid traffic growth. It is the focus of the US 113 North-South Limited Access Highway Study by DelDOT, Sussex County and the Federal Highway Administration.

Area 3 is the Southwest Corner of US 113 and 16. This area consists of large agricultural properties. A commercial development in the form of a Gas and Go/Mini-Mart Convenience has been proposed at the southwest corner of 113 and 16. DelDOT has reiterated its intention not to allow curb access directly from the US 113 frontage at this corner. A DART First State Express Bus Stop is located on the west edge of US 113 just south of the corner site. The development proposal described for Area 1 also involves 85

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acres of land to the west and south of the corner site being proposed for the commercial development.

Area 4 is the Northeast Corner of the Study Area. It is agricultural with woodlands and streams. Major properties in this area care are now being enrolled in the Delaware Agricultural Lands Preservation program. The Norfolk & Southern Railroad track limits access in this area. There are houses located along the frontages of Fleatown Road, Ponder Road, Holly Tree Road and Hummingbird Road. The portions of these roads closest to the northeast corner of the Town are more developed. The close-in portions of Area 4 are included in the Ellendale-New Market Sanitary Sewer District but there are no lines in this area. A vacant former gas station and the former Town dump are located off of Ponder Road just outside this corner of the Town. The Town cemetery is on Cemetery Road.

Area 5 is the Area Around the Federalist-Era New Market Village. It includes the historic New Market Methodist Church cemetery. The area consists of a low-density mixture of farms and homes located along Reynolds Pond Road at Holly Tree Road and between Hummingbird Road and Route 16, the Ellendale-Milton Highway. A Force Main of the new Ellendale-New Market Sanitary Sewer System runs along Reynolds Pond Road to the New Market Village mobile home park. The sewer line was designed to correct failing septic problems at the mobile home park. No other properties along the 2-mile route of the force main are connected to the sewer system.

Area 6 is the Area Between Delaware Route 16 and Spicer Road. It is rural and green in character. Route 16 is the east-west arterial road connects Ellendale and Milton. It is called Main Street in the Town and Beach Highway and the Ellendale-Milton Highway west and east of the Town limits. Route 16 also serves increasing volumes of interstate traffic between Maryland and the Delaware Beaches. The area between Route 16 and the Ellendale Swamp, along both Spicer Road and Route 16, has a rural mix of farmland, natural resource, low-density residential and scattered agribusiness, institutional and governmental uses. The former Queen Anne's Railway Line runs through this area. Spicer Road forms the eastern edge of the Swamp. Within the guidance of the Sussex County Zoning Ordinance, both Spicer Road and Beach Highway have gradually been experiencing new rural-style Mixed-Use development while preserving natural resources and agriculture as predominant land uses.

Area 7 includes the 1,000-Acre Ellendale Swamp And Adjacent Smaller Swamp Properties. It is the centerpiece of the hydrological system of the area. The Norfolk and Southern Railroad track runs through the center of the Swamp. The Swamp is the central remnant of what was once a much-larger Ellendale Swamp. The streams mentioned in this Plan rise in the Ellendale Swamp. This is a conservation area of statewide significance.

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Area 8 is a historically built-up neighborhood, developed in several stages, reaching from Route 16 (Beach Highway) south along Old State Road. It includes several distinct older and newer residential areas between the Ellendale Swamp and DuPont Boulevard. There are two churches, a cemetery, social organizations, and farms within this neighborhood area. The Village of New Hope, a seriously deteriorated neighborhood now under improvement is located at the south end of this area. The former salvage yard at the southwest corner of Route 16 and Old State Road is now being restored by its new owner. It would be excellent if a Welcome to Ellendale sign and perhaps landscaped area with flowers could be located at this corner.

Area 9 is the Area North of Route 16 Between Old State Road and US 113 As Far North as the Appenzollar Tract of the Ellendale State Forest. It is a historically built-up neighborhood with business uses along its US 113 frontage, a mixture of uses along Beach Highway, a church, cemetery, community center, several important social institutions located in the southeastern portion of this area and newer housing development along the east side of Old State Road both inside and outside of the current Town boundary. There are six large agricultural parcels at the center of Area 9. There is a very large parcel of land in agricultural use between Old State Road and the Norfolk and Southern Rail Line. Several larger industrial uses, remnants of the earlier Railroad Era, are located just north of the Town boundary along the west side of the railroad track.

The Map entitled Potential Growth and Annexation Area depicts the area established, through analysis and discussion with the County and State, for the processing of possible requests from property owners for future annexations. It shows an area of Potential Growth and Annexation in two phases, each of ten years. Annexations are anticipated to begin within 10 years within the 1st Phase Potential Annexation Area, and after 10 years but within 20 years within the 2nd Phase Potential Annexation Area. No annexation requests will be processed in the 2nd Phase area prior to ten years. This long-term approach is intended to give the Town of Ellendale time to create a Town Planning and Zoning Commission, prepare a Municipal Zoning Ordinance and Municipal Subdivision Regulations, implement a Public Water Supply System and develop its municipal services and revenues. Within the Potential Growth and Annexation Area, the Town would welcome any annexation requests to incorporate longstanding existing neighborhoods within the Town. It would also process any annexation requests by private developers within this area. What becomes actual annexation depends entirely on the initiative of property owners and existing neighborhoods. As described earlier, special land conservation programs may also occur in this area, also at the voluntary initiative of private property owners.

The Maps entitled Greater Ellendale Area Future Land Use and Town of Ellendale Future Land Use establish two new categories of future land use. One is Mixed-Use for sites where, based on their size, location, access and condition, there is reason to believe that an approach emphasizing a mix of residential, commercial and community facilities, planned street and building layouts, attractive facades, landscaping along streets and

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coordinated signage is appropriate and feasible. The other is Railroad Square, the historic Town Center of Ellendale, designed to reflect the historic and mixed-use character of the village center and nearby portions of Main Street. The third is, which is described in the Potential Growth and Annexation section. Other future land use categories shown include Agricultural/Natural resources/Open space, which includes lands under conservation as well as lands zoned AR-1 and AR-2 under the Sussex County Zoning Ordinance, Business, Residential – Single Family, Residential – Mobile Homes, and Institutional/Civic/Government.

The Existing Land Use Map shows existing land use categories that for the most part are the same as the future land use categories, with the additional existing land use category of Residential - Vacant.

The Framework for Future Land Use Map illustrates the following forces affecting existing and future land use in the Study Area.

The DuPont Boulevard/US Route 113 North/South Regional and National Highway Corridor is shown passing along the western edge of the developing community. The Comprehensive Plan envisions it to be socially, economically and physically important to integrate this major traffic corridor into the Ellendale community.

The Main Street/Beach Highway/Delaware Route 16 East-West Regional Highway Corridor is shown passing through the heart of Ellendale and connecting the three primary business intersections: US 113 and DE 16, DE 16 and Old State Road and Railroad square in the Town Center.

The Norfolk and Southern Railroad Line and Siding that was the reason for the founding and growth of Ellendale.

The Peninsular Divide between the Nanticoke River and Chesapeake Bay Watershed and the Broadkill River, Cedar Creek and Delaware Bay Estuary Watershed is shown as it passes through the center of the Study Area.

A Queen Anne's Railway Greenway Trail, within the context of a Broadkill and Nanticoke Rivers Greenway corridor, is shown on the Future Land Use Plan. This is both a major land use and a circulation concept of the Plan.

The Greenbelt of Ellendale, centered on the Ellendale Swamp and extending north and south from Railroad square to encircle the community in a Greenbelt of natural space, forest, swamp and farmland.

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The Future Land Use Plan shows the following land use categories in addition to those shown on the Existing Land Use Plan.

Agriculture/Natural Resource/Open Space – On the Future Land Use Plan, open space, agriculture and natural resource lands are grouped together to present a coherent picture of the continuous network of green space in and around Ellendale. This is Ellendale's Greenbelt, which extends both within and around the Town. It will be implemented through a new Municipal Zoning Ordinance to be created by the Town of Ellendale. Within areas outside the Town Boundary, it will be implemented by the Agricultural Residential classification of the Sussex County Zoning Ordinance.

A Mixed-Use Development Area is shown within the block of land bounded by Old State Road on the east, Delaware Route 16 (Beach Highway) on the south, US 113 on the west and the southern boundary of the Appenzollar Tract of the State Forest on the north. The following types of uses would be permitted in the Mixed-Use Area:

- ☐ Housing in a variety of types, including affordable and market-rate home ownership housing, low and moderate-income rental housing, and retirement housing, and including single-family, townhouse or garden apartment styles;
- ☐ Office uses, including medical and professional office space;
- ☐ Retail and commercial uses;
- ☐ Service businesses serving local or area markets; and,
- ☐ Light Industrial uses subject to special design controls to ensure compatibility with adjacent uses. Light Industrial Uses would not be allowed within 1,000 feet of the State Forests.

The Town of Ellendale will develop a Mixed-Use zoning district as part of its planned Municipal Zoning Ordinance. Within the Mixed-Use district, the ordinance will provide design standards for landscaping and buffering in order to achieve compatibility between uses. The Town will also create Municipal Subdivision Regulations. Both the Zoning Ordinance and the Subdivision Regulations will require a Planned Unit Development (PUD) approach for large parcel developments 5 acres or more in land area. PUD requirements will require developers to create master plans in order to guide phased, mixed-use development within their development areas.

A Residential/Agricultural Area is shown on the west side of US 113 approximately from a line extending from the southern boundary of the Appenzollar Tract to a line extending Sharon's Road across Route 113. This is an area within which property owners are expected to elect to choose between future development for Residential Use, most likely involving requested annexation, or continued Agricultural Use, most likely involving requested inclusion in Delaware's Agricultural Lands Preservation Program.

Residential/Business Areas are shown for properties, or groups of properties, which are viewed as appropriate for a mix of business and residential activity. These areas are

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located along major traffic arterials, the Norfolk and Southern Railroad and in the traditional Town Center.

Table 27 shows approximate acreages of Future Land Use by category and percentage of total for the area within the current Town boundary.

Table 27
The 2004 Greater Ellendale Comprehensive Plan
Future Land Use By Category, Acreage & Percentage of Total
Within The Current Town Boundary

Agriculture/Natural Resources	34.60 21%
Commercial/Industrial	1.54 1%
Institutional/Civic/Governmental	13.99 8%
Mixed-Use	3.84 2%
Residential-Single-Family	87.77 53%
Utility/Public	0.39 0%
Public Rights-of-Way and Other	17.32 15%
Total Acres	167.02
Total %	100%

Source: Nutter Associates & SU Regional GIS Cooperative

Table 28 shows approximate acreages of Future Land Use by category and percentage of total for the area between the Current Town Boundary and Potential Growth and Annexation Area boundary.

Table 28
The 2004 Greater Ellendale Comprehensive Plan
Future Land Use By Category, Acreage & Percentage of Total
Between the Current Town Boundary and PGAA Boundary

Agriculture/Natural Resources	246.78 21%
Commercial/Industrial	23.52 2%
Institutional/Civic/Governmental	25.77 2%
Mixed-Use	278.74

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	23%
Residential-Single Family	564.73
	47%
Public Rights-of-Way and Other	58.35
	5%
Total Acres	1,197.90
Total %	100%

Source: Nutter Associates & SU Regional GIS Cooperative

- ☐ The Comprehensive Plan shall serve as a policy guide for revitalization projects, public improvements, annexations, land subdivision, rezoning, special exception uses, design standards, variances and capital expenditures.
- ☐ It will guide changes or additions in water and sewer service, transportation improvements, planning for community facilities and the pace and timing of new development.
- ☐ Land use and community development planning shall consider both the incorporated and unincorporated portions of the Greater Ellendale Area.
- ☐ Land use decisions will recognize the vision and goals expressed by the Ellendale Comprehensive Plan, which are seen as inherent to Ellendale's time, place and historic development.

E. Community Revitalization

Goal: To address problems of deterioration and opportunities for new development with a community revitalization approach that addresses both old and new.

Ellendale is a historic community. Railroad Square, as it is addressed in this draft goals statement, and New Market and New Hope are heritage areas with deteriorated buildings with good adaptive reuse potential. There appear to be numerous sites that would be attractive for rehabilitation and well-designed new development. The community should give equal attention to the challenges of older buildings and those of new development.

Vacant and Deteriorated Buildings and Sites

Goal: View vacant land and buildings as opportunities for adaptive reuse to eliminate blight and improve community vitality.

Ellendale has vacant and deteriorated buildings that require an active revitalization approach to determine their highest and best use, rehabilitation potential and funding sources.

The objective with regard to vacant buildings and land is to proactively find procedures and solutions to bring them into vital and productive use.

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- ❑ Evaluate the highest and best use potentials of the Town's vacant buildings and parcels, consistent with preserving the integrity of surrounding properties and uses, especially residential and parkland.
- ❑ Develop new procedures through which the Town, working as appropriate with non-profit and property-owner organizations, can act to halt the deterioration caused by vacant properties.
- ❑ Encourage new uses that result in healthy new activity and increase Ellendale's tax base, taking into account the needs of surrounding land uses.

F. Economic Development

Goal: To retain and attract new jobs, business investment and economic activity to Ellendale.

The Economic Development Goal is to establish a comprehensive plan that offers action projects and opportunities that retain and attract jobs, investment and business activity to Ellendale. Economic Development opportunities include commercial, service and light industrial developments at US Route 113 and DE 16, DE 16 and Old State Road and in the heart of Ellendale's original commercial district in "Railroad Square", at Main Street and East and West Railroad Avenues.

New development can take place in the forms of commercial plazas, small business parks, agricultural or forest businesses, small businesses and home occupation uses. The northern portions of the rail siting at the former Ellendale Excelsior site is an opportunity for light industrial, distribution and/or transshipment use.

The former Queen Anne's Rail Line is owned by the State of Delaware and is now called the Milton Industrial Track. The 6.5 miles of surviving track runs between the Ellendale Junction in Railroad Square and the Cannery Village Mixed-Use project in Milton. The track and right-of-way can provide an opportunity for recreational and compatible economic use. Railroad Square can be a vibrant trailhead on this Greenway.

Economic development directions include community services, hunting and fishing, eco-and heritage tourism, trailheads and Greenways, existing and new forms of agriculture and distribution and light assembly. It is envisioned that these uses would be compatible in scale with an Ellendale "that looks like Ellendale".

The objectives for economic development are to achieve a healthy pace of growth, develop the tax base of the Town and implement partnerships that accomplish the goals of the Comprehensive Plan. Having partnerships with strong standards will protect the natural and historic environment, accomplish sustainable residential, commercial and civic development and achieve the Plan's design objectives. The Town commits itself to directing development to existing close-in areas with adequate public facilities and

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services. The purpose in doing so is to ensure harmonious development, minimize infrastructure costs and avoid unnecessary taxes.

- ❑ Ellendale's economy has always been that of timbering, agricultural market and railroading center, symbolized by Railroad Square and the daily freight trains that pass through it. This economy is now changing and it is essential that Ellendale seek new forms of commercial economic activity to supplement the traditional base.
- ❑ Promote the skills and potentials of Ellendale's Labor Market within its effective region.

G. Potential Growth and Annexation

Goal: To develop the required Potential Growth and Annexation Area element of the Comprehensive Plan in a manner which gains reasonable consensus among community, business, County and State desires and which brings the greatest benefit to the Ellendale community.

Ellendale's location is influenced by the rapid population growth and development of Lewes and Rehoboth Beach, Delaware's Atlantic coast resorts, and by the westward expansion of this growth to Milton, Millsboro and Milford. There is also a major north-to-south growth pattern developing in Delaware that reaches south from Pennsylvania and New Jersey. Sussex County's population is now growing at the phenomenally rapid rate of 3.8% per year.

National and East Coast trends in retirement living are influencing future growth. The country is at the beginning of a 20-year period in which America's "Baby Boom", born between 1946 and 1964 as children of the World War II generation, is approaching retirement. Accelerating growth is also reflective of Sussex County's low tax structure and pro-development philosophy.

The growth of Ellendale is influenced by the presence of underserved community areas that have a high incidence of housing deterioration, lack of services, health problems and poverty. Many individuals and groups have now come together to correct these problems and direct new resources toward them. There is great interest in new utility provisions, affordable home ownership, housing rehabilitation and rental housing development as well as new and rehabilitated community facilities and public improvements.

Under the Livable Delaware program, a Comprehensive Plan is responsible for demarcating a "Potential Growth And Annexation Area" which includes both the Town and surrounding areas appropriate for new growth and annexation.

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The fact that Ellendale, New Hope, Old State Road and New Market have been provided with a new Sussex County sewer system is an important factor in this aspect of the Comprehensive Plan.

The Potential Growth and Annexation Area element is often the most difficult part of a Comprehensive Plan, given the complexity of policies, attitudes and aspirations surrounding growth and annexation. The fact that annexation in America is a voluntary process and is difficult to predict adds to the complexity.

There are often conflicts between the desires for urban development and those for farmland preservation.

A Comprehensive Plan is expected to address the fiscal implications of growth or non-growth in terms of balancing revenue with the costs of services.

Important factors in demarcating a “Potential Growth and Annexation Area” include:

- ☐ The community’s vision and goals for the future,
- ☐ Existing and projected municipal boundaries,
- ☐ Existing and proposed municipal services,
- ☐ Population data and growth projections,
- ☐ Existing development and market trends,
- ☐ Sewer districts, water districts and other utility infrastructure,
- ☐ The 2003 Sussex County Comprehensive Plan Update,
- ☐ Delaware’s State Strategies for Policies and Spending Map and absorption analysis for future development,
- ☐ DelDOT’s US 113 North/South Study and Corridor Capacity Preservation Program,
- ☐ DNREC’s Delaware Greenways and conservation programs,
- ☐ The Delaware Department of Agriculture’s Agricultural Districts and Agricultural Lands Preservation programs,
- ☐ Committed community projects, including public institutions, facilities and services as well as private development projects,
- ☐ Transportation planning in general,
- ☐ Natural resource and environmental protection factors,
- ☐ Land conservation goals and implementation tools to achieve them,
- ☐ Community design, conservation and preservation principles, and
- ☐ Revenue expectations from anticipated future growth.

The Potential Growth and Annexation Area of The 2004 Greater Ellendale Comprehensive Plan includes areas west, southwest, south, northeast and east of the Town. The major growth area is to the west, between Old state Road and US 113. The existing Beach Highway and North and South Old State Road neighborhoods are shown within the Phase 1 Growth and Annexation Area.

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The emphasis in the areas north, east and southeast (Ellendale Swamp) of the Town is on forest and farmland preservation.

It is the objective of the Town of Ellendale, and of the Greater Ellendale area of which it is a part, to grow at a measured and moderate pace in keeping with its traditional character as a small Delmarva community. Moderate growth will assure quality and compatibility in design between existing and new development. It will also help sustain the natural environment, preserve community history and enhance Ellendale's economic base for the benefit of future generations. It is also the objective to view annexation as a tool for planned growth and a means of planning for appropriate uses, densities and design.

□ Twenty-Year Population Growth And Land Absorption Projection

The 2004 Greater Ellendale Comprehensive Plan includes a twenty-year population growth and land absorption projection in order to plan for future development and provide it with adequate municipal services. A rational estimate of future population growth and land absorption is necessary, but it is not wise to believe that it will be absolute. American society places positive values on flexibility and adaptation and on both urban growth and farmland preservation. It is also because of the high rate of growth being experienced by Sussex County. The Town of Ellendale wishes to positively participate in this growth for the benefit of its citizens, neighbors and surrounding areas.

The following assumptions and projections have been used to approximate future growth for the purposes of the plan.

The Town is assumed to grow within portions of the Potential Growth and Annexation Area that are contiguous with its current municipal boundaries. All annexations must be contiguous.

During the 1990-2000 time period measured by the US Census Bureau, the Town of Ellendale grew at an average annual rate of 1.31%. Zip Code Area 19941 grew at the average annual rate of 1.46%. Sussex County grew at the average annual rate of 3.83%. Ellendale's population in April 2000 was 327 persons and that of Zip Code Area 19941 was 2,302.

2004 has been a year of very low mortgage interest rates (5%) and positive growth in the Gross Domestic Product (at least 4.0 %). It can be assumed that Sussex County will continue to grow at a vigorous rate for the foreseeable future. The Delaware Population Consortium has projected an average annual growth rate of 2.8% for Sussex County over the next twenty years.

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The goal of the Comprehensive Plan is to help integrate the Town of Ellendale into this more vigorous growth pattern.

It is assumed that Ellendale grew at the same average annual 1.31% growth rate during the four-year time period from April 2000, the time of the census 2000 enumeration, and April 2004, and that the Town's April 2004 population was approximately 344 persons, an increase of 17 persons since the Year 2000.

During the six year time period 2005-2011, the Comprehensive Plan will take effect, the new Ellendale Sanitary Sewer System will be fully operational and the Town will have the opportunity to institute Town zoning and decide whether to approve and implement a new public water system. For the five and one-half year May 2005-2011 period, an average annual growth rate of 1.5% has been used to estimate future year population.

A 1.5% annual growth rate during the May 2005-2011 period results a total Town population of 372 by 2011, an increase of 28 persons since April 2004.

At an average household size of 2.3 persons, growth of 28 new residents would result in the need for 12 new dwelling units. These could be accommodated through rehabilitation of existing homes or infill development of new homes on land within the Current Town Boundary.

During the 13-year 2012-2025 remaining time period of the Plan, Town growth is projected to be 2.4% per year, consistent with current population projections for Sussex County as a whole as prepared by the Delaware Population Consortium. This means 31% growth over the 13-year period, resulting in 115 additional new Town residents by 2024, for a total Town population of 487 persons.

Assuming continuation of the long-term trend toward decreasing average household size, and using an assumed average household size of 2.3 persons during this time period, and a residential density in new development of 4 dwelling units per acre, growth of 115 additional new residents results in 50 additional households, or dwelling units, and the need for 125 additional acres of land used for residential development.

Within the surrounding 1.0-1.5 mile ring area, which touches on the current Town boundaries, population declined from 817 in 1990 to 707 in the year 2000, an average annual rate of decrease of -1.36%. Between the Year 2000 and 2025, the population in this area is projected to increase at an average annual rate of increase of 1.57%, reflecting the same phasing and development assumptions as those used for the Town, with relatively slower growth in the 2000-2011 time period and more rapid growth in the period between 2012-2005.

At an average projected household size of 2.5 persons over this period, assuming larger household sizes outside the Current Town Boundary, the increase of 817 additional

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persons in the surrounding area results in an estimated 326 additional households by 2025. At an average density of 4 dwelling units per acre, this number of additional households, or dwelling units, translates into a need for 82 additional acres of residentially developed land.

Adding the estimated 2025 population of the Town (487 persons) with the estimated 2025 population of the one-mile ring outside the current Town boundaries (2,118 persons), results in a total population of 2,605 persons in the Town and surrounding area, with a need for dwelling units to accommodate 616 additional households.

The extent to which this estimated growth of 616 households is accommodated “within the incorporated Town” as opposed to “outside the incorporated Town” depends on a host of decisions made both by government and the individual households, as well as builders and developers. As a policy guideline, it is expressed as a goal in this analysis that 75% of the 616 households, or 462 households would be accommodated in new dwelling units within the Town. At 4 dwelling units per acre, this indicates a need, or demand, for 115 acres of new residential development.

This figure includes both currently undeveloped land within the present Town boundaries and land that could be annexed into the Town.

The planning principles described in the Comprehensive Plan are that both annexation and agricultural land preservation are voluntary actions by property-owners, that annexation lands must be contiguous with the municipal boundaries they touch, and that significant areas within the boundary will and should remain farmland as part of contiguous blocks of farmland that reach into the countryside.

- ❑ In keeping with the principle that annexation is voluntary, and that the Town desires good annexations as part of its future development, the conditions for annexation need to be made attractive. Through adopting progressive zoning, generally demonstrating good positive government, and implementing selected public improvements along the edges of Town, annexation can be encouraged. Once one or more property owners have requested annexation, the Town should evaluate the proposal in keeping with the standards set forth in House Bill 255. These include adequacy and cost of the services that the Town would provide to the newly annexed area. The benefits to the Town of annexation should be carefully weighed. The Town should seek to enter into annexation agreements in which the annexed area is contiguous with Town boundaries and connected to its street system. These types of fragmentary annexations lead to fragmentation of services and confusion as to neighborhood political representation.
- ❑ Implement the Town’s goal of connecting with U.S. Route 113 for economic and social reasons and in order to connect with a vital area where there is interest in annexation and large parcels for redevelopment. Business development along U.S. Route 113 could require up to 100 acres of new commercial land development

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during the twenty-year timeframe of the Plan. The Future Land Use Plan shows areas of land that are deemed suitable for this purpose. The Potential Growth and annexation Area shown comprises approximately 2 square miles of land area, or 1,200 acres, of which the estimated totals of 115 acres of residential use and 100 acres of commercial use would represent 25%.

- ❑ Adopt the Potential Growth and Annexation Area Element included in this Comprehensive Plan in accordance with HB 255. This will then serve as the basis for annexation policy. Treat the boundary shown on the map as the basis for a future Town Growth Boundary and Greenbelt for Ellendale.
- ❑ Consider appropriate incentives for annexation in cases where annexation is desirable. Incentives might include paying for advertisement costs or partial payment of a portion of water and sewer connection and assessment costs at such time as the property owner requests connection to these systems.

H. Transportation

Goal: Work with DelDOT and Sussex County to build transportation improvements that provide for safe and efficient transport of people and goods, carefully relating transportation, land use and economic development, and using a community design approach that makes transportation improvements handsome community design amenities. These improvements should include handsome “Ellendale Gateway” designs for the US 113/Delaware-Route 16 and Delaware Route intersection, the Route 16 (Beach Highway) and Old State Road intersection and the Delaware Route 16 (Main Street) and East and West Railroad Avenues intersections at Railroad Square. New sidewalks and landscaping should also be added to Old State Road and Beach Highway. Traffic calming measures will need to be instituted along the Beach Highway and Main Street portions of Route 16. Provisions will need to be made for traffic signals at impacted intersections (most likely at Old State Road and Railroad Square).

Three important community economic development “gateways” in the Comprehensive Plan Study Area are the intersections of 113/16, 213/16 and Route 16 and West and East Railroad Avenues.

DelDOT is now working on a US 113 North/South Study designed to increase traffic capacity in the region. The goal is to make Route 113 into a limited access highway. Maryland is making major investments in dualizing 113 between the Delaware Line and Snow Hill.

The US 113 Limited Access Highway alternative distributed by DelDOT at the September 13, 2004 meeting of the Ellendale Working Group has many good qualities. One good quality is the two-way local access frontage road along the east side of the US 113 right-of-way. However, the design proposed for the US 113/Delaware Route 16 intersection should be reworked as discussed at the Working Group meeting. The alternative would have placed barriers within the existing Beach Highway neighborhood

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and between it and surrounding places. The alternative should be redesigned in a way which:

- ☐ Preserves the integrity of this traditional neighborhood,
- ☐ Continues good local access by keeping Beach Highway open as a local street continuous with other local streets,
- ☐ Provides safe pedestrian and bicycle access within the neighborhood, and
- ☐ Enhances the street with new landscaping and street trees, sidewalks and open space.

The historic center of this neighborhood includes Mount Zion AME Church and its grounds, the church cemetery and the adjacent New Hope Recreation Center fronting on Old State Road and numerous historic homes along Beach Highway. The ultimate US 113 plan should recognize development projects underway in the neighborhood, including,

- ☐ Construction of an addition to the New Hope Recreation Center,
- ☐ Construction of a new parsonage for Mount Zion AME Church,
- ☐ Planning for a Mount Zion AME Church housing for the elderly project, and
- ☐ Design and installation by the Delaware Public Archives of a Delaware Historical Marker commemorating the African-American history of the neighborhood.

The highway project should be closely coordinated with the planned streetscape and sidewalks project for Old State Road. It should also be coordinated with DART First State transit improvements along Old State Road and Main Street, including improvement to the transit stop at the New Hope Recreation Center. The plan should preserve nearby sites for affordable housing development. It should encompass traffic improvements, such as traffic calming and possible traffic signals along the length of Main Street through the Town of Ellendale. It should allow for coordination to improve the northwest corner of Beach Highway and Old State Road as a small landscaped park. Finally, the design should recognize the fundamental character of the US 113/Delaware Route 16 intersection as a “Welcome Gateway” to Ellendale, with appropriate welcome signage and landscaping. A goal of The 2004 Greater Ellendale Comprehensive Plan is to preserve and enhance a strong design relationship between the Ellendale’s Railroad Square and Town Center, the Beach Highway neighborhood and the DuPont Boulevard.

Route 16 through Ellendale is one of two main “beach highways” connecting Maryland’s Chesapeake Bay Bridge via Route 404 to Lewes and Rehoboth Beach. Maryland is now dualizing Route 404. The other “beach highway” is the extension of Route 404 to Route 9 through Georgetown and via Route 9 to Lewes. Within Ellendale, traffic is increasing on Route 16 as a result of its connection with MD 404 and its direct “Reach the Beach” function.

It may be that increasing through traffic volumes on Route 16, in addition to left turn movements from north-south streets, result in a future need for new traffic management techniques. Needs could be for additional signage, left turning lanes, intersection

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improvements, streetscaping, improved visibility at corners, inclusion of the roadway in a new Greenway design or even the addition of one or more traffic signals.

The Wildlife Corridor proposed by The Nature Conservancy should be considered as part of DelDOT's US 113/Route 16 design improvements.

There are transportation needs for bicycling and hiking trails, including connections with the new American Discovery Trail, and potential for kayaking, canoeing and hiking along the waterways connecting the Chesapeake Bay and Delaware Bay watersheds.

DelDOT's DART public transit route 210 runs between Milford, Ellendale, Milton and Georgetown. Within Ellendale, DART Route 210 traverses Old State Road south to a turnaround at the Philadelphia Holiness Pentecostal Church and then along Route 16 to Milton and Georgetown.

DelDOT is now developing new statewide bicycle and pedestrian plans that will offer opportunities for Ellendale and Sussex County. Bicycling along Route 16, along a route parallel to US 113 (possibly on County Road 42 west of 113), the Queen Anne's Railway Line to Milton and the American Discovery Trail are being considered. Hiking should be emphasized along the Queen Anne's Railway Line. New sidewalks should be developed along Old State Road and Route 16 between Old State Road and DuPont Boulevard.

Rail was and is a key determining form of transport in Ellendale. The Norfolk-Southern railroad company operates the main north-south rail line from Milford to the Maryland Line. The Delaware Rail Administration, a subsidiary of DelDOT, owns the former Queen Anne's Railway, now called the "Milton Industrial Track", between Ellendale and Milton. This State-owned rail right-of-way to Milton appears to offer a splendid potential for a Greenway hiking and biking trail, either in the form of a "Rails-with-Trails" or a "Rails-to-Trails" a project. An independent short-line railroad company uses the Queen Anne's line and the Ellendale rail siding for freight car storage. It should be possible to preserve this valuable railroad use in tandem with a unique Greenway project. The line could also be used for scenic rail tour excursions in future years, perhaps in conjunction with scenic tours on the rail line between Georgetown and Lewes. Both lines are state-owned facilities.

Ellendale is close to the Sussex County Airport and Industrial Park in Georgetown. There is a Milford Airpark on Route 113 in Milford. There is also a private airfield near New Market.

The objective for Transportation is to provide safe and efficient transportation for pedestrians, bicyclists, hikers, boaters, motorists, air transport and commercial freight. This includes the reworking of street designs to make them more attractive as well as more functional.

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I. Environmentally Sensitive Areas

The objective for Environmentally Sensitive Areas is to protect them for the benefit of all residents using Federal, State, County and Town resources for environmental protection.

Goal: Protect the irreplaceable swamp, forest, stream, habitat, floodplain, wetlands, aquifer and historical and cultural resources of the community.

Implementation would be via partnerships between the town, community institutions, non-profit organizations, the county and state and private companies.

The Greater Ellendale Greenway is at the center of the hydrology and topography of the Study Area. The waterway system is a part of the Nanticoke River and Chesapeake Bay Watershed. It must be protected against environmental degradation. The Town should work with DNREC to develop the necessary ordinances to protect its environment, including any areas to be annexed in the future.

New Town Code Provisions

In developing a new Municipal Zoning Ordinance and other additions to its Town Code, the Town of Ellendale will consider incorporating the following environmental review procedures:

Wetlands and Waterbodies:

1. Preserve and enhance Ellendale's wetlands and waterbodies through conservation, protection and responsible development practices.
2. Minimize creating impermeable surfaces that inhibit the recharge of aquifers and threaten flooding.
3. Incorporate an overlay zone into the planned Town of Ellendale Municipal Zoning Ordinance in order to prohibit inappropriate development within mapped wetland areas as delineated by the State Wetland Mapping Project. Inappropriate development includes subdividing wetlands into lots, construction of permanent structures or dwellings and construction of storm water management ponds. Disturbance of wetlands may be unavoidable for such activities as utility lines or road crossings, but such activities should occur only if there is no alternative.
4. Require that wetlands be delineated on site plans and require that the U.S. Army Corps of Engineers verify the delineations.
5. Require compliance with the Regulations Governing the Use of Subaqueous Lands (Chapter 72, Title 7, Delaware Code).
6. Develop a buffer ordinance. This ordinance should mandate a vegetated buffer zone of no less than 100 feet from any stream, creek, river, pond and wetland. It should also encourage wider buffer zones where significant natural resources exist

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or where water quality could benefit from additional buffer zones. Require that site plans show a 100-foot buffer zone.

7. Prevent water quality degradation by requiring compliance with the Delaware Sediment and Stormwater Regulations (Chapter 40, Title 7 Delaware Code) and best management practices as contained in the Delaware Erosion and Sediment Control Handbook (revised 2004) or most up to date version.
8. Participate in the implementation of Total Maximum Daily Loads (TMDLs) regulations for the Nanticoke River, Cedar Creek, Mispillion River and Broadkill River.
9. Identify opportunities for stream, wetland and swamp restoration projects.

Forests & Trees

1. Develop a forest or natural resource overlay zone for inclusion into area zoning ordinances that will limit the extent of forest clearing allowable for development activities and prevent forest fragmentation. This ordinance should reflect the Town's commitment to preserving its forested areas. The ordinance requirements should be weighted based upon factors such as quality or health of the forest, proximity to wetlands or streams and proximity to rare and/or endangered species.
2. Require a review of Natural Heritage factors by the DNREC Division of Fish and Wildlife's Non-game and Endangered Species Program in order to protect of any rare or endangered species on a site are followed.
3. Develop a street tree program that will identify ensure the maintenance of street trees and trees within Town right-of-ways.

Floodplains

1. Reduce the risks of damage to property and personal safety by developing a floodplain overlay zone that will:
 - Require that 100-year floodplains (and base flood elevations if determined by FEMA or a professional engineer and approved by FEMA) be shown on site plans.
 - Require that buildings in new subdivisions, and other new buildings, be located outside of the 100-year floodplain whenever possible.
 - If development or newly constructed buildings are proposed within the floodplain, require that the lowest floor of the building be elevated on a properly designed foundation so that the bottom of the horizontal floor supports are at or above the 100-year flood level.
 - In all instances, require that the lowest floor level shall be at or above the level of immediately adjacent roads to allow positive drainage.
 - Require that the inside crawl space floor of buildings constructed on crawl spaces be at or above the lowest outside grade.

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- Require that all mechanical equipment, and HVAC components be located above the base flood elevation.

Water Resource Protection Areas

1. Protect groundwater quantity and quality by establishing wellhead protection areas and areas of excellent and good groundwater recharge (as delineated by DNREC). Follow recommended source water protection practices as outlined in the Sourcewater Protection Guidance Manual for the Local Governments of Delaware (March, 2004).

Drainage

1. Require that tax ditch right-of-ways be shown on site plans.
2. Ensure that development projects do not hinder off-site drainage upstream of a project area and ensure that the project does not create off-site drainage problems by release of on-site storm water.

Total Maximum Daily Loads (TMDLs)

The Federal Clean Water Act now requires that be established for waterways with impaired water quality so the waterways can attain their designated uses. TMDL's are Total Maximum Daily Loads as a calculation of the maximum amount of a pollutant that a waterbody can receive and still meet water quality standards, and an allocation of that amount to the waterbody in question.

DNREC 305(b) Watershed Assessment reports were reviewed for the three watersheds involved in the Study Area: the Nanticoke River Watershed, the Broadkill River Watershed and the Delaware Bay Estuary Watershed.

The Nanticoke River Watershed includes Gravelly Branch and Cedar Run in the Study Area. The assessment report notes that concentrations of population are spread out along the highways of this watershed area and that the rural nonfarm population is rapidly expanding. The waters of the watershed are designated as having Exceptional Recreational or Ecological Significance (ERES) and therefore receive a higher level of protection. The watershed supports a variety of valued recreation opportunities including recreational and tournament fishing; boating and water skiing; swimming; wildlife observation and hunting. In its ponds, nitrogen levels were considered high in 53% of the acreage and moderate in the remainder. The Nanticoke River Watershed is targeted as a high priority for determining the total maximum daily loads (TMDL's) for nutrients.

In the Delaware Bay Estuary Watershed, which includes Cedar Creek and its tributaries, average nitrogen, phosphorous and chlorophyll-a levels were considered moderate.

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In the Broadkill Watershed, which includes the Sowbridge Branch, the report notes that average nitrogen concentrations in the ponds were considered moderate while average phosphorus and chlorophyll-a concentrations were considered high.

Alternatives for reducing pollution from stormwater runoff include installing buffers along streams and promoting good lawn maintenance practices (i.e. proper application of fertilizer, herbicides, pesticides, etc.) on town-maintained grounds and on private properties as well.

An essential part of a Pollution Control Strategy consists of the use of EPA Best Management Practices in the final design of the utility systems, and in policies governing the design review and approval of development projects. Control and limitation of surface runoff is the major objective of these practices.

Elements of the Pollution Control Strategy for the Nanticoke River include:

- ☐ Reduction of nonpoint nitrogen loads by 50%
- ☐ Reduction of nonpoint phosphorus loads by 50%
- ☐ Avoiding development on hydric soils
- ☐ Establishing vegetative buffers
- ☐ Limiting impervious surfaces
- ☐ Improving storm water quality through the use of Best Management Practices
- ☐ Retrofitting storm water drains to block passage and filter harmful materials
- ☐ Removal of bacteria, nutrients and sediments
- ☐ Avoiding Combined Sewer Overflows (CSO's)
- ☐ In addition, the planned Zoning Ordinance and code revisions should include measures to limit development within the 100-year floodplain. Development should be limited in this FEMA-designated area by types of permitted developments, base flood elevations, densities and setback requirements.

A TMDL reduction Strategy for the Delaware Bay/Broadkill River Watershed is scheduled to be completed by the end of 2006.

Environmental Review procedures recommended by DNREC are included in Appendix E.

J. Community Facilities and Services

Goal: To provide for the potential growth or improvement of community services and facilities that respond to modern needs and standards, are desired by the community and are affordable to client groups.

The Greater Ellendale Community has a diversity of community services and facilities. These include the Kent Sussex Detox Center in the former Ellendale Elementary School, the New Hope Recreation and Development Community Center in the former African-

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American school at Old State Road and Main Street, transition housing on Old State Road, a new US Post Office, the Ellendale Town Park, Town Hall and Police Department, the Ellendale Volunteer Fire Company Fire Hall, the Community Education And Service Center at the Philadelphia Holiness Pentecostal Church and the Ellendale United Methodist, and the Ellendale United Methodist Church, Mount Zion AME Methodist, Shiloh AME Methodist and Philadelphia Holiness churches.

Support should be given to the following current housing and community development projects which are identified as part of the Comprehensive Plan: Mount Zion A.M.E.'s new parsonage project and its interest in developing housing for the elderly on the church site; Philadelphia Holiness Pentecostal Church's project to build 18 townhouse units on its church property; and the construction of a new community center addition to the New Hope Recreation and Development Center on Old State Road.

A special effort should be undertaken to redevelop and improve New Hope Village on south Old State Road. The effort should focus on strengthening community participation, new community improvements, finding cooperative ways to develop greater home ownership and remedying public health problems.

Ellendale is a small town with limited municipal services. The Town has a Police Department that, in addition to community policing within the Town and service as needed in a limited area around it, maintains a vigilant watch over Route 16 traffic.

Any growth in municipal services would require a larger tax base with minimal impact on existing residents and would include new development within the Town or in areas which could be annexed into the Town in future years.

Additional municipal services mentioned in community discussions include planning and zoning, trash collection and possible development of a water system as described in the Supporting Plans section.

K. Institutional and Civic Uses

Institutional and civic uses are seen as key to the vitality of community life and pride. The objective is to support existing institutions and seek to create new ones as community growth occurs.

- ☐ Support Town institutions and voluntary associations, like the Ellendale Volunteer Fire Company and Ellendale's many non-profit and charitable organizations in their roles of providing valuable service to the Town, its residents and visitors.
- ☐ Support cooperative efforts among institutions.
- ☐ Renovate the Ellendale Town Hall and the adjacent Town Park to include new space for the Ellendale Police Department and the new Planning and Zoning.

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L. Historic and Cultural Resources

Goal: To incorporate in Ellendale's planning attention to the preservation, protection and enhancement of the community's historic and cultural resources, including preserved architecture, historical sites and memorials to important community places and events.

Ellendale is an important historic area that reflects both the vitality of Sussex County's agricultural heritage and the town building and architectural legacy of the railroad era of the late nineteenth century. As growth occurs, it is important to ensure the preservation of this legacy. Historic preservation tools like the use of a historic area zoning overlay district, historic nominations of buildings and districts to the National Register of Historic Places, future adoption of a Historic Preservation Ordinance and creation of a Historic Preservation Committee, use of federal and/or state historic preservation tax credits for rehabilitation, and heritage marketing and tourism all need to be considered in the Plan.

Historic and cultural resources include, but are not limited to, the Railroad Square area at Main Street and the twin Railroad Avenues, historic Victorian-era homes in the oldest streets of the village and along nearby country roads, farms and farm buildings from earlier times, historic buildings such as the African-American School at Old State Road and 16, the former Ellendale Elementary School now housing the Kent Sussex Detox Center, and the churches and cemeteries of the community. Perhaps the largest single historic feature of Ellendale is its railroad junction and lines.

In developing a new Municipal Zoning Ordinance and other additions to its Town Code, the Town of Ellendale will consider incorporating the following historic preservation procedures:

- ☐ Work to preserve and to promote the Town's historic architecture and the Town of Ellendale-Railroad Square Historic Area.
- ☐ Work to list the Potential Town of Ellendale/Railroad Square Historic District in the National Register of Historic Places. The State Historic Preservation Office is available to help the Town with this process. In doing so, the Town should seek guidance and advice from the State Historic Preservation Office on the development of historic preservation procedures.
- ☐ The Town should create an Ellendale Historic Area Overlay District as part of its Municipal Zoning Ordinance Project. Within this Overlay District the Planning and Zoning Commission would be requested to give special attention to historic preservation factors.
- ☐ The Town should consider the creation of a full Historic Area Historic Preservation Ordinance for the District, one that establishes formal historic review guidelines and establishes a Historic Preservation District Commission to conduct these reviews. In doing so, the Town should consider adding reasonable affordability measures, as the City of Lewes has recently done.

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- ❑ The Town should encourage developers who are qualified to undertake rehabilitation projects in the Historic Area to investigate the use of State of Delaware and Federal Historic Preservation Tax Credits for properties that are listed on the National Register, either individually or as part of a Historic District.
- ❑ Encourage creative adaptive reuse of historic structures, including allowance for flexibility.
- ❑ Make residents and visitors more aware of the Historic Area and other historic buildings and sites, promoting the area through house tours, walking tours and brochures, streetscape design and special events.
- ❑ Ellendale is an ancient community of Nanticoke and Leni Lenape Indian roots. It has a long and varied history of development only just beginning to be interpreted. Important themes are its Indian heritage, the early migration of English families from Virginia and Maryland, African American History and Agricultural and Railroad History.

M. Farmland Preservation

Goal: To include best management practices and recommended action projects to help Ellendale's farmers remain in farming and earn a profit, to protect agriculture as an economic land use, to support new agricultural marketing and value-added activity, to develop agri-tourism activity, and to preserve farmland.

Important tools could be the establishment of a farmers' market, the creation of agricultural districts and the purchase of easements by Sussex County and the Delaware Department of Agriculture's Delaware Agricultural Lands Preservation Foundation.

The Greater Ellendale Area includes prime agricultural lands, especially to the north, east and west of the Town. In addition to the economic value of these lands as viable job producing and income-generating agriculture, the farmlands are part of nature's mantle around the Town, complementing the Forests and Swamplands to the south.

N. Land Conservation

Goal: To support the protection and expansion of Ellendale's Natural Resource Lands, including the Redden and Ellendale State Forests, the Ellendale Swamp, stream tributaries and other forested parcels, through use of a public-private partnership conservation approach.

Ellendale's magnificent supply of natural resource lands can best be conserved and expanded through a public-private partnership bringing together Sussex County, the State of Delaware Open Space Council, the Delaware Greenways Council, the state's Departments of Agriculture and Natural Resources and Environmental Control, non-profit land trusts, tributary action groups and community representatives. The Delaware

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Department of Agriculture's Forest Service is now beginning to update the Redden and Ellendale Forest Management Plans.

The Delaware Agricultural Lands Preservation Foundation purchase of development rights program is well funded at the present time and can be more intensely used in the Ellendale Area.

The Nature Conservancy and other non-profit conservation foundations including the new Sussex Land Trust either can be active members of a public-private conservation consortium in the Ellendale area. The State of Delaware has now announced a new \$22 million "Green Infrastructure" program for 2004.

- ❑ In order to accomplish these policies within the framework of the Comprehensive Plan, an Ellendale Broadkill-Nanticoke Greenway, Open Space and Outdoor Recreation Program should be prepared. The program would:
 - ❑ Provide an Implementation Program for the Open Space recommendations of The Comprehensive Plan.
 - ❑ Prepare a development concept for Greenway-related development sites, specifying uses that will contribute to the Greenway and the Town Center, that are environmentally appropriate and that will contribute to the design landscape.
 - ❑ Within the Greenway encourage hiking and canoeing or kayaking along the streams that connect the watersheds.
 - ❑ Coordinate with the new, February 2004 2003-2008 Statewide Comprehensive Outdoor Recreation Plan (SCORP) prepared by DNREC, including its survey of Western Sussex County preferences and priorities,
 - ❑ Give stronger definition to the Greenway natural corridor and the Greenway Trail, especially through the center of Ellendale,
 - ❑ Establish measures for creating riparian buffers along the tributaries in the Study Area,
 - ❑ Conduct interviews with landowners, civic leaders and other stakeholders,
 - ❑ Work closely with DNREC and the Delaware Department of Agriculture,
 - ❑ Work with other municipalities and historic communities in the Study Area, including Milton, Milford, Lincoln and Georgetown,
 - ❑ Work with neighborhood groups and agencies to assess the needs for new neighborhood parks, play grounds and equipment, ball fields, school recreation facilities and walkways within the Town and its immediate environs,
 - ❑ Consider the relationships between new streetscape design treatments and the provision of open space,
 - ❑ Inventory important elements of existing open space within Ellendale, whether publicly or privately owned or in active or passive use, and consider measures which may help preserve these spaces where open space has the greatest benefit to the community,

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- ☐ Identify the best current practices in Delaware or elsewhere for seeking reasonable set asides of open space by developers in their development projects,
- ☐ Stress measures to achieve an interconnected and continuous open space system in which one facility is connected with the next,
- ☐ Address the relative roles in oversight, planning, special and general benefit, design, development, ownership and operation of neighborhood groups, line agencies, private parties, non-profits and state, County and local government,
- ☐ Address the best role that Town and County zoning ordinances and subdivision regulations can play in carrying out a comprehensive open space and outdoor recreation program,
- ☐ Identify open space items which should be included in a Five-Year Town of Ellendale Capital Improvement Program,
- ☐ Consider project characteristics which indicate eligibility for funding sources such as Transportation Enhancement under the Surface Transportation Act, the federal Land and water Conservation Fund, the Delaware Trust Fund and the Governor's Green Infrastructure Program,
- ☐ Give special consideration to recreational needs involving public facilities, including new sites that might be dedicated in future developments,
- ☐ Develop a program to identify and acquire easements necessary for trail development,
- ☐ Develop a phasing plan by five-year increments and a priorities plan by very high, high and moderate categories,
- ☐ Consider the need for new street trees, other tree plantings, floral gardens, vegetative buffers, and other landscaping treatments, and the possibility of a special ordinance to implement these measures, and
- ☐ Design measures for increasing public appreciation of the Greenway, including volunteer organization, publicity, festivals and special events, and community outreach and educational programs.

O. Open Space and Trails

Goal: Open space should be preserved and expanded within the Ellendale Area, and walking, hiking and biking trails established, especially as development begins to occur and exerts pressure on former open areas.

In order to protect the tradition of a rural, low density and green community, steps need to be taken to protect and expand open spaces. This can take the form of good municipal and county zoning and subdivision regulation requiring developers to preserve open space and natural features as part of their projects, conservation easements, expansion of the State Forests, the acquisition and dedication of new active or passive parks, playgrounds, trails, and tot lots, and the creation of Greenways.

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The presence of the new Atlantic-to-Pacific American Discovery Trail along Ellendale's southern edge and the designation of a Delaware Bay-to-the-Nanticoke Greenway by state agencies offer enormous opportunities to Ellendale to protect and enhance its environment. The Plan should identify cooperative and evolutionary measures to achieve this goal.

If a permanent Greenway Trail were to be created within the Ellendale Study Area, it could include:

- ☐ The conversion of the 6.5 mile Queen Anne's Railway Line to a major Delaware Greenway which functions as a component of, or linkage with, the American Discovery Trail between Cape Henlopen State Park in Lewes, Historic Milton, the Redden State Forest, Bridgeville and Adamsville on the Maryland Line.
- ☐ Viewing the Greenway and trails potential as an "Ellendale Crossing" of two major elements, an east-west Greenway across this portion of Delaware, and a land bridge between the Nanticoke River and Delaware Bay watersheds.
- ☐ Redesigning portions of Route 16 - Beach Highway as a portion of the Greenway, especially in the area between Railroad Square and US Route 113.
- ☐ Developing the Greenway Trail west of the 113/16 intersection partly along Route 16 and partly via easements on flanking lands.
- ☐ Connecting the Greenway elements south of the Ellendale Swamp into the Redden and Ellendale State Forests by using existing forest paths and four-wheel drive service roads.
- ☐ Developing a Habitat, Forest and Waterway Interpretive Program to provide an educational resource for hikers and bicyclists, families and children.

The Town and community should work closely with DelDOT and DNREC on an initiative for trails. The use of Transportation Enhancement and Green Infrastructure funding sources should be explored.

P. Residential Areas

Goal: To develop new methods of rehabilitating older Ellendale residential areas and building new ones. The objective of the Housing Element is to ensure an adequate supply and diversity of safe, decent, affordable and well-designed home ownership and rental housing for both present and future residents.

Methods should emphasize good community design, planned open space, a variety of lot and house sizes, access to transportation including public transit, bicycle and pedestrian facilities, measures to ensure housing affordability and densities which preserve the natural features of surrounding landscapes.

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Standards and objectives for these elements addressed by the plan include: Livable Delaware Program community design guidelines, subdivision standards which allow cluster development, encouragement of Mixed-Use development and street tree planting.

- ❑ View housing fix-up and rehabilitation in all neighborhoods of Ellendale as a primary goal of the Comprehensive Plan. This can best be achieved by pursuing town-wide improvements in code preparation and enforcement.
- ❑ Vacant infill sites should be identified for redevelopment with appropriate home ownership and rental housing.
- ❑ Redevelop vacant sites in with new developer-built home ownership homes, using the home ownership counseling services of the First State Community Action Agency. Supplement this effort with street, sidewalk and streetscape improvements as appropriate.
- ❑ Make creative use of Community Development Block Grant and housing rehabilitation funds to improve housing conditions where they are most severe in Ellendale.
- ❑ The Town should allow accessory apartment units in residential districts in its Zoning Code.
- ❑ The Town should encourage housing designs with roof pitches and eave dimensions consistent with Ellendale's traditional architectural styles.
- ❑ In the larger marketing sense, Ellendale should prepare itself for a new level of interest on the part of retiring members of the Baby Boom generation, born between 1946 and 1964. This enormous segment (approximately one-third) of the American population is now beginning to reach its retirement years. At the present time, the “leading edge” of the Baby Boom, persons born between 1946 and 1950 are approaching retirement. Many live in the Philadelphia, Wilmington, Baltimore, Washington DC and Norfolk metropolitan areas. It is predicted that some 30 million American households of this generation will seek new residential locations over the next twenty years. Delmarva is an attractive location to this group. The pattern appears to be that its members prefer smaller, somewhat more urban house styles and lots, with houses focused on first floor living. Ellendale will surely attract its share of new residents from the group, especially given the growth characteristics of Sussex County.
- ❑ Encourage the development of an innovative, well-designed Senior Retirement Housing in Ellendale, as close to the Town Center as possible.
- ❑ Promote Ellendale as a community for artist’s studios and living units, again on sites in or close to the Town Center.
- ❑ Address housing rehabilitation needs throughout the Study Area with housing rehabilitation incentives coordinated between the Town of Ellendale, the Sussex County Community Development and Housing Division and the Delaware State Housing Authority.
- ❑ Encourage innovative subdivision and housing designs by upgrading the Town’s zoning ordinance, subdivision regulations and housing code.

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- ❑ Recognize the Town's historic housing stock as its single greatest asset for the future
- ❑ Develop an active housing fix-up, reinvestment, rehabilitation and new development effort including both home ownership and rental housing
- ❑ Strongly limit conversions of single-family homes to multi-family units or commercial uses
- ❑ Identify and promote new residential development areas with low-density, well-designed housing types well-suited for Ellendale
- ❑ In new housing development, seek to implement the Smart Growth density and design principles of the Livable Delaware program and the principles enunciated by the Sussex County Comprehensive Plan. These design principles give guidance to developers to consider densities of at least 3-4 units per acre in order to concentrate development and conserve open land. They also encourage developers to use a clustered design for new subdivisions, where living units are concentrated in the portion of the site most suitable for development, and the remainder of the site left open for conservation and recreation.

Q. Town Center and Business Areas

Goal: To specify community goals for the revitalization, development and planning of business uses around the 3 primary intersections of Ellendale: US Route 113 and Route 16, DE Route 16 and Old State Road and Railroad Square at Route 16 and the twin Railroad Avenues.

Each of the 3 intersections has widely differing historical, spatial and traffic characteristics and each has a different market for revitalization and development. The Plan should provide community guidelines for each of the three.

- ❑ Larger-scale Mixed-Use Commercial Development at the U.S. Route 113/U.S. Route 16 intersection. The intersection draws on increasing local and regional traffic volumes. It involves the community's highest land values. Where once the "Railroad Square" intersection of Route 16 and Railroad Avenue was the traditional "100 % corner" of Ellendale, now 113/16 has this role. It is the western gateway to Ellendale and should be so designed. It may have potential as a future location for one or more small business uses or parks. Uses would be largely auto-oriented, but could be also served by transit and pedestrian or bicycle facilities. This area will form a major part of the "welcoming image" for Ellendale, because it is where regional north south and east-west traffic streams meet and enter the community.
- ❑ Medium-scale, Well-designed Strip Commercial Development at the Route 16 (Beach Avenue)/Route 213 (Old State Road) intersection right on the municipal border. Since land here is still underutilized, this is a major redevelopment opportunity of the type that is appropriate for smaller communities. It can be based on well-designed municipal zoning and attracting good developers. Since this

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location is adjacent to several community institutions, social benefits can be significant. People can easily walk to this location. They can ride the bus there. There can be a strong relationship with neighborhood churches, as this is a “churches corner”. It is an excellent services, retail and office location at a small scale.

- ❑ The Historic Town Center at Railroad Square. “Railroad Square” at the intersection of the Norfolk and Southern and Queen Anne’s Railroad lines and Main Street is a historic place of characterful buildings. Many are underutilized and in need of repair, but have good potential for adaptive reuse. New in-fill uses could include a small historical display about the origins of Ellendale, small retail convenience uses, a trailhead for with signage and maps, a DART transit stop, a parking area, eco-tourism services for hikers, bikers and perhaps portaging kayakers and canoeists and beach-traffic attractions. The Ellendale Trading Company is already beginning to develop these themes in the Railroad Square area. There is the opportunity to develop them further over time.

The Railroad Square Idea as a Historic Preservation Focus

"Railroad Square" is a major concept of the Comprehensive Plan. It is the central place of the railroad village at the edge of the forest. It was created in its present form when the Junction and Breakwater Railroad was constructed in 1868, further by the construction of the Queen Anne's Railway in 1898, and further yet as a result of the Town Plan of 1905. It is the starting point of the surviving 6.5 miles Queen Anne's Railway track to Milton and Cannery Village. The Norfolk and Southern Railroad line, successor to the Junction and Breakwater, runs straight through the square with some 4 trains a day. Fronting on it is a number of historic buildings, including the excellent 1905 Read House.

Immediately to the south lies the Ellendale Swamp, the scene of Indian legends and later of Loyalist uprisings during the American Revolution. And here it is also where streams rise that begin their descent into both the Nanticoke River Watershed to the west and the Delaware Bay Estuary to the East. There is an interesting Fire Service Lookout Tower, in need of repair, on the south edge of Route 16 just southeast of the village.

From a visitor’s perspective, if you look to your right (south) while passing through Ellendale, you could turn off and drive two blocks along West Railroad Avenue to the edge of the forest, then cross the Norfolk and Southern tracks (notice the Queen Anne’s Line directly in front of you as you make the turn) and drive back north along East Railroad Avenue to Route 16 (Main Street or Beach Highway). A visit to the Ellendale Trading Company on the north side of 16 is a good introduction to Ellendale. There you could purchase a copy of Ellendale - "Reminiscing the Past", a well-done local history compiled by the Ellendale Ruritan Club.

The goal is that "Railroad Square" become a reality through small-scale improvements, landscaping, signage, the Delaware Historical Marker being designed by the Delaware

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Archives, by the addition of a small convenience shop (which Ellendale citizens and trail users could both enjoy and get to know each other) and by becoming a trailhead on a Queen Anne's Railway Greenway Trail.

Possible Light Industrial Development

Goal: To bring a component of light industrial development to Ellendale and to do so at the right location.

As a result of its railroad and industrial heritage, Ellendale has an actively used main railroad line with an intact railroad siding along the west edge of the Norfolk and Southern tracks north of Route 16. This siding was once the site of the Ellendale Excelsior Company and Clendaniel Sawmill. Today, a short-line railroad company uses a portion of this land which is currently zoned Commercial by Sussex County. Other portions of this land could serve as a site for light industrial, distribution, storage or transshipment uses. The Town of Ellendale should work together with the Sussex County Department of Economic Development and the Delaware Office of Economic Development to implement this goal.

R. Utility Infrastructure

Goal: Develop innovative, low cost utility systems, such as a municipal water supply system, to serve the Greater Ellendale community in a healthful and affordable way as well as to protect the environment.

Ellendale has made great progress as a result of Sussex County's installation of a new Ellendale Sanitary Sewer System. Additional progress is needed in the areas of supplemental sewer service and treatment through spray irrigation, provision of broadband Internet service, provision of trash pick-up and street lighting service and establishment of a community drainage plan.

Policies and Projects:

- ❑ Sussex County Ellendale Sanitary Sewer System – Encourage residents to hook up to the new sewer system in time to avoid paying the impact fees that will become due after January 2005, a deadline which has already been extended from July 2004. Plan for expanding the capacity of the Sewer System to accommodate desirable future growth throughout the District. This can take the form (1) of activating the present provision in the Sussex County-Town of Georgetown Memorandum of Agreement for increasing the amount of Ellendale sewage that will be accepted at the Georgetown Sewage Treatment Plant from 115,000 gallons per day to 165,000 gallons per day; (2) of working with the Town of Milton on a new joint use Wastewater Treatment Plan between Milton and Ellendale, or (3) of planning for a new Wastewater Treatment Plant in the Greater Ellendale Area

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which might include acquisition or lease of farmland for Spray Irrigation Wastewater Treatment. The County and State have agreed that 300 new housing units can be accommodated by the existing system. The Town agrees to closely coordinate with the County and State on the sewage requirements of future development and annexation requests.

- ❑ Planning for a Future Public Water System – The Town should evaluate the Greater Ellendale Public Water System Feasibility Analysis to determine the physical feasibility, affordability and desirability of a new Public Water System for the community. A new water system should be centered on, and controlled by, the Town of Ellendale. It should ultimately serve an area coterminous with the Potential Growth and Annexation Area. It should include provision for serving sub-areas within the PGAA that may not be actually annexed until later years. A water system should both further contribute to public health and environmental protection and provide a constructive tool to attract and manage healthy growth. Possible relationships with adjacent Towns and private water utilities should be explored. A Request for Proposals (RFP) should be issued by the Town of Ellendale to solicit possible interest by these parties. For these purposes, the Town should consider securing a Certificate of Public Convenience and Need (CPCN) from the State of Delaware Public Service Commission.
- ❑ High-Speed Internet Service - Work with higher levels of government and public service providers to gain access to broadband Internet service either through cable or telephone lines.
- ❑ Needed New Municipal and Community Services - Analyze state, county and municipal services and revenues to determine cost/benefit and revenue methods of providing new municipal and community services such as trash pick-up.

S. Intergovernmental Coordination

Goal: The Town and community should seek to maximize intergovernmental cooperation with adjacent local agencies, municipalities, Sussex County and the State of Delaware.

The Town and community should continue to work closely with the Ellendale Volunteer Fire Company, municipalities like Milton, Milford and Georgetown and Sussex County and State of Delaware agencies.

The Town would develop planning and zoning measures in coordination with Sussex County Planning and Zoning and the Delaware Office of State Planning Coordination.

Public-Private Partnerships

Goal: Seek help, skill and funding resources from a variety of public, non-profit and private entities.

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Through informal cooperation, working agreements or memoranda of understanding, and contracts, the Town and community can work together with larger public, non-profit and private entities with special expertise, legal and financial resources.

T. Governmental Measures

Goal: The community should seek measures to strengthen the Town of Ellendale government.

- ☐ The Town should adopt its own Zoning Ordinance and Subdivision Regulations in order to have a greater say in land use and development. It should establish a Planning and Zoning Commission and a Board of Adjustment, in addition to working cooperatively with Sussex County in the areas of Building Code, Housing Code, Soil and Water Conservation and county zoning outside the Town boundaries. The Town Charter should be examined to develop constructive changes.
- ☐ The Town should also develop a plan for future municipal services and revenues, seeking help from experienced Town Management professionals. New services which should be planned for include the addition of a part- or full-time Town Manager, Town Clerk or Office Manager; addition of part-time Code Enforcement Officer services, the addition of Trash Removal services and budgeting which can allow for small annual capital improvement projects to the Town Park or other facilities.

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VII. Implementation Of The Comprehensive Plan

A. Town Government

- ☐ Town government should pay special attention to developing new revenue sources through which it can address infrastructure and program needs and build confidence in its citizenry, the surrounding unincorporated community and county and state agencies. New revenue sources which need to be considered include transfer payments from Sussex County and the State of Delaware, steady participation in the U.S. Department of Housing and Urban Development Community Development Block Grant program, grants and loans from state, federal and foundation sources, user fees for Town services and general taxes such as the property tax.
- ☐ Identify a series of Action Projects to be completed over a series of short, mid and long-term time frames in order to begin the implementation of the Comprehensive Plan. Develop a tracking system to monitor progress on the projects. Consider having regular Action Project progress reports at each Town Council meeting.
- ☐ The Town should create a 5-7 member Town of Ellendale Planning and Zoning Commission as part of the action project to create a Town of Ellendale Zoning Ordinance and Official Zoning Map. It will also need to establish a 5-7 member Board of Adjustment to hear appeals and requests for area variances under the new Ordinance. The Town should also arrange for regular Code Enforcement activity by a qualified person. This "Code Enforcement Officer" would process applications, permits, inspections and the handling of complaints and related community issues under the Zoning Ordinance once adopted. The Officer would act under the authority of the Town Council. He or She would also monitor activity under the other sections of the Town Code, including Maintenance, Housing, Subdivision Regulation and other pertinent sections. Finally, the Enforcement Officer would work in liaison with the Sussex County Department of Planning and Zoning and the State of Delaware Office of State Planning Coordination. The Town should avail itself of training and educational opportunities such as professional conferences to offer Commission and staff training in the best planning and zoning practices. Speakers should be invited to come to Ellendale to discuss experience in special areas such as design review.
- ☐ The Town, in cooperation with leaders and organizations in the surrounding Greater Ellendale community, should target Economic Development, new job creation and small business attraction as needed activities in Ellendale. Heritage- and eco-tourism, festivals and special events should be seen as integral components of this economic development effort.
- ☐ The Town Council should consider the creation and maintenance of new and existing open spaces as part of its purview. The Town will need to help advocate the creation of the proposed Broadkill-Nanticoke Greenway Trail along the Queen Anne's Railway Line, planning for events and improvements to the Ellendale Town Park and the reservation of open space in new developments.

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- ❑ Over the long term, the Town should investigate the possibility of establishing a Design Advisory Panel to advise on design issues pertaining to projects under review. Community design is an important component of progress.

B. Regional and Intermunicipal Cooperation

- ❑ Develop new partnerships for cooperation and coordination with nearby local governments and communities (such as Milford, unincorporated Lincoln, Milton, Greenwood and Georgetown) and with Sussex County government. The Town should meet with these groups from time to time and participate actively in intermunicipal activities (such as those sponsored by the Sussex County Association of Towns) in the region. To the extent that Town festivals and special events can be coordinated with adjacent municipalities like Lincoln or Milton they should be.
- ❑ Work closely with Delaware State agencies like the Office of State Planning Coordination (OSPC), the Delaware Economic Development Office (DEDO), DNREC and DelDOT in advancing Ellendale's programs.
- ❑ Explore service consolidation and sharing arrangements with Sussex County where they make good sense. The Sussex County Ellendale Sanitary Sewer District, and its relationship to a potential Ellendale Public Water System (pending results of the feasibility analysis) is the major current example and challenge in this area.
- ❑ Work with regional entities such as area institutions of learning like Del Tech, Sussex Tech others on initiatives of mutual interest, most likely involving the environment, transportation and the planned growth of a small municipality.
- ❑ Promote the appreciation, improvement and protection of the Ellendale Historic Area in concert with Sussex County's Southern Delaware Tourism Program and the Delaware State Historic Preservation Office on the Dover Green.
- ❑ Develop a Town 5-Year Capital Improvement Program coordinated with the C.I.P. program of Sussex County and that of DelDOT.
- ❑ Develop the Town's computer system capabilities, hardware and software in order to put into daily use the GIS – Geographical Information Systems mapping and database which has been prepared as part of the Comprehensive Plan.

C. Land Use & Zoning

- ❑ Translate the Future Land Use Plan component of The 2004 Greater Ellendale Comprehensive Plan into an Official Zoning Map to accompany the proposed Town Zoning Ordinance.
- ❑ Coordinate the Town Zoning work with the Sussex County Zoning Revisions now underway to implement the Sussex County Comprehensive Plan Update adopted by the County Council in January 2003. This is especially important because large portions of the Greater Ellendale Study Area are now regulated under the Sussex County Zoning Ordinance, and especially its AR-1 regulations. Others are affected

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by proposed County zoning amendments dealing with Commercial Area and Highway Corridor areas.

- ❑ The Town should in the long term adopt a model Historic Preservation Ordinance for the Ellendale Historic Area.
- ❑ Professional historical and archaeological research should be encouraged within the Greater Ellendale Area, which clearly has a rich Native American, European Settlement and African American history of traditions, leadership and developments.

D. Economic Development

- ❑ Consider Economic Development to be part of the everyday affairs of the Town, as a balance of jobs, housing and community institutions is essential for the health of a growing Ellendale.
- ❑ Work closely with the Sussex County Department of Economic Development, DEDO and DelDOT to consider economic development projects as part of the work of the US 113 North/South Study in the Ellendale area. Ellendale's economic development has historically always been centered on transportation improvements, including Old State Road, the railroad and the DuPont Boulevard, and should continue to be transportation-based.
- ❑ Work with DNREC to develop plans and a program for the Broadkill-Nanticoke Greenway within the Greater Ellendale Area, including stream restoration and tributary action projects which can ultimately be economic development projects benefiting heritage and eco-tourism.

E. Potential Growth and Annexation

- ❑ The Town should create a Municipal Zoning Ordinance and Subdivision Regulations and establish a Planning and Zoning Commission prior to annexing new lands.
- ❑ The Town should ensure that future annexations are designed to respect the character of Ellendale and be integral parts of the Town. This means continuity of streets and landscaped areas, design styles that are compatible with those of today's Ellendale and a general design respect for the historical community centered on Railroad Square and Beach Highway. Annexations will only be considered after creation of a Planning and Zoning Commission, Municipal Zoning and Subdivision Regulations Ordinances and planning for additional services, revenues and infrastructure.
- ❑ Undertake fiscal impact and cost of services analysis for proposed annexations, consistent with the requirements of House Bill 255, making use of the cost/benefit model being finalized by the City of Dover under a grant from the Office of State Planning Coordination. HB 255 requires that the Town submit a "plan of services" to the Office of State Planning Coordination detailing how services will

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- be provided to the annexed area. Letters from each service provider need to be included in the plan of services submission.
- ❑ Develop a fair policy for allocating the costs of new infrastructure, such as water and sewer facilities, roadways, trail rights-of-way, open space reservations, between the general benefit district of the Town and the specific development projects which benefit. The policy should be based on the recognized concepts of “general benefit” for the community as a whole versus “special benefit” for developers and users within a given project area. Developers and specific users should be expected to pay those portions of cost that result in special benefit to the developer’s project or a small group of users.
 - ❑ Prior to approving annexation projects, the Town should ask that the following topics be addressed by the developer:
 - ❑ The proposed size, scale, housing types and character of the project in relationship to the existing scale and character of Ellendale;
 - ❑ Provision of any community facilities and services, open spaces and commercial facilities within the proposed development in relationship to the existing scale and character of Ellendale;
 - ❑ Relationship of the proposed development to existing transportation systems, including those of the State, County and Town, including the US 113 North/South Study;
 - ❑ Relationship of the proposed development to the Sussex County’s Ellendale Sewer District;
 - ❑ Relationship of the proposed development to the Greater Ellendale Public Water System Feasibility Analysis;
 - ❑ Relationship of the proposed development to the principles of the Livable Delaware program of the State of Delaware;
 - ❑ Whether, in terms of location, estimated services requirements, revenues and benefits, the proposed development is fiscally responsible and should be considered for potential annexation into the Town of Ellendale.

F. Historic and Cultural Resources

- ❑ As part of the roadway and streetscape revitalization project for Old State Road, a plan should be prepared to commemorate the special history of this “Federalist Era” road and the role it has played in the development of Ellendale.
- ❑ Consider applying for Ellendale’s inclusion in the Chesapeake Bay Gateways Network and Water Trails program operated by the National Park Service. Ellendale should apply for inclusion in this innovative program based on its unique environmental and heritage importance as a bridge between the Nanticoke River/Chesapeake Bay and Delaware Bay Estuary Watersheds, as the site of the Ellendale Swamp and as a demonstration of the significance to the Bay of a community which stewards the outer edge of the Chesapeake Bay environment. No Delaware community has applied for inclusion in this program, which could be a major community opportunity for Ellendale.

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- ❑ Work with the Delaware Public archives to design and install the “Railroad Square” Delaware Historical Marker in such a manner that it is visually prominent to passing traffic on Delaware Route 16, focuses on the relationship between the railroad and the forest and memorializes the stages of history of Ellendale. Consider requesting additional markers in future years.
- ❑ The Forests of Ellendale and Redden, and the Ellendale Swamp, are unique cultural and historic resources of the community. Their historic and cultural qualities should be expressed as often as possible in Town documents, pamphlets and the Forest Plans of the Delaware State Department of Agriculture.

G. Environmental Protection

- ❑ Use U.S. Environmental Protection Agency and DNREC recommended Best Management Practices in decisions and policies pertaining to wellhead protection, ground-water recharge and surface drainage.
- ❑ Incorporate in the Comprehensive Plan the overlay maps prepared by DNREC that delineate, as critical areas, source water assessment, wellhead protection and excellent ground water recharge potential areas. As part of the Zoning Ordinance developed by the Town, include the DNREC recommendations included in Appendix E.
- ❑ The Town should seek the counsel of DNREC in helping it comply with all DNREC environmental regulations, including TMDL plans for Cedar Creek, the Mispillion River (which Cedar Creek combines with at Mispillion Light, just before debouching into the Delaware Bay Estuary) the Broadkill River and the Nanticoke Rivers.

H. Open Space & Outdoor Recreation

- ❑ The Town and DNREC should work closely on stream restoration efforts and on long-term plans that also recognize the environmental education and enjoyment potentials of these waterways.
- ❑ Apply to DNREC and the Office of State Planning Coordination for funding assistance to prepare a Broadkill-Nanticoke Greenway, Open Space and Outdoor Recreation Plan. The program would implement the goals and policies of The Comprehensive Plan and raise public awareness about the Greenway.

I. Marketing, Promotion and Special Events

- ❑ 2005 will be the Centennial of Ellendale. Events and improvements should be coordinated to make this a memorable event and one that honors the proud history of the community in all its facets. A Centennial Committee should be formed bringing together representatives from throughout the Greater Ellendale community.

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- ☐ Plan for improvements in Railroad Square coordinated with improvements to Town Park and initiation of the proposed Queen Anne's Railway Greenway Trail that invite daily stopping off visits to Railroad Square as a trailhead, town gathering center and component of economic development for the area. The unveiling of the Railroad Square Delaware Historical Marker on September 18th can be a first step in celebrating these potentials. Perhaps modest improvements, such as floral plantings, can be done in time for the 2005 100th Anniversary of Ellendale.
- ☐ Develop a brochure and walking tour for both the Ellendale Historic Area and adjacent areas of forest and swampland.
- ☐ Begin to develop a small annual Ellendale Forest Festival which can take place on the 4th of July, occur in the Railroad Square and Town Park center of the community, involve numerous community groups like the Ellendale Ruritan Club, churches and public agencies and possibly be tied in to the themes of railroading and hiking in the forests.
- ☐ Demonstrate the possibility of enjoyable hiking and canoeing through the Greater Ellendale Land Bridge connecting the Waterways between the two Bays. This could consist of having a group of hardy canoeist/kayaker/hikers hike and kayak up the Nanticoke River and the Gravelly and Maple Branches, portage along Willow Street past Town Park and through Railroad Square and continue along the Sowbridge Branch into the Broadkill River to Milton and Lewes.
- ☐ The Town should work with the Delaware Department of Agriculture to determine whether a small, weekly Farmers' Market may be feasible, either at Railroad Square or at the US 113/DE 16 intersection, where it might be incorporated into the commercial development proposed for the southwest corner of the intersection. This would be an integral part of a "Welcome to Ellendale" project.

J. Periodic Review of the Comprehensive Plan

- ☐ Delaware's Planning Laws and its Livable Delaware Program, as administered by the Office of State Planning Coordination, requires that the Comprehensive Plan be reviewed and updated at least every five years.
- ☐ The State encourages Towns to develop appropriate zoning regulations to implement the Comprehensive Plan within 18 months after adoption of the Plan.

K. Town Code and Charter Review

- ☐ The Code of the Town of Ellendale should be reviewed and updated after adoption of the Comprehensive Plan. Reference should be made to pertinent sections of the Comprehensive Plan in the relevant portions of the Code.
- ☐ Ellendale's Town Charter is a historic document that needs to be brought into line with modern practice. Its annexation provisions should be reviewed with the State of Delaware and revised in accordance with a more streamlined statewide practice. Specifically, the requirement for a double referendum, inside and outside, should be critically reviewed to determine whether it should be eliminated.

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L. Project Review Requirements

- ☐ Once the Town of Ellendale has established a Planning and Zoning Commission and has established a Municipal Zoning Ordinance and Subdivision Regulations, all proposed development projects in the Town will be reviewed to ensure that they are in accordance with The 2004 Greater Ellendale Comprehensive Plan, the Municipal Zoning Ordinance and Subdivision Regulations, the goals of the Livable Delaware Program and applicable State of Delaware and Sussex County regulations. Plans will be reviewed by Sussex County, the Town of Ellendale Police Department, the Ellendale Volunteer Fire Company, Inc., and the Delaware State Fire Marshall to ensure that fire, police and emergency service requirements are met. Prior to the approval of development projects, the Town will ask the County to verify that sewer service is available. If it is not, a plan for providing sewer service to the project will be developed. Such a plan would include developer contributions to provide adequate service to the project, at the approval of the County. In all applications for annexations, a Plan of Services will be prepared in accordance with the requirements of House Bill 255.

M. Five-Year Implementation Program

Within the framework of The 2004 Greater Ellendale Comprehensive Plan, the Town will work to carry out the following Five-year Comprehensive Plan Implementation Program:

- ☐ Establish A Municipal Planning And Zoning Commission,
- ☐ Create A Municipal Zoning Ordinance And Subdivision Regulations,
- ☐ Prepare An Enhancement Program For The Revitalization Of Railroad Square As The Heart Of The Historic Village,
- ☐ Work To List The Potential Town Of Ellendale Railroad Square Historic District On The National Register Of Historic Places And Incorporate It In A Zoning Ordinance Overlay District,
- ☐ Initiate Implementation Of A Greater Ellendale Public Water Supply System,
- ☐ Seek Developer Investment in Community Revitalization,
- ☐ Encourage Annexations That Reach To US 113 For Economic Development
- ☐ Work To Develop Municipal Services And Revenues And Establish Part-Time Town Manager and Code Enforcement Positions,
- ☐ Establish A Development And Annexation Project Review Procedure Which Includes Assurance Of Adequate Public Facilities, Cost/Benefit Analysis, Close Coordination With Sussex County On Sewer Service And A Master Planning Approach For Large Projects,
- ☐ Welcome and Encourage Existing Neighborhoods Within The Potential Growth And Annexation Area Boundary To Seek Annexation Into The Town, and
- ☐ Work With Community Groups To Help DelDOT Prepare An Acceptable Plan For The US 113/Delaware Route 16 Intersection As Part Of The US 113 North/South Limited Access Highway Study.

THE 2004 GREATER ELLENDALE COMPREHENSIVE PLAN

**ADDENDUM
TO THE DECEMBER 7, 2004
APPROVAL OF THE 2004 GREATER ELLENDALE COMPREHENSIVE PLAN
BY ORDINANCE
OF THE ELLENDALE TOWN COUNCIL
PERTAINING TO THE SPECIAL STUDY AREA WEST OF US 113**

Pursuant to a consensus reached at a Special December 6, 2004 Meeting of the Town Council with the Delaware Office of State Planning Coordination and representatives of Sussex County, DelDOT, the Delaware Department of Agriculture and interested citizens, the Ellendale Town Council made the following addendum pertaining to the area west of US 113 in its December 7, 2004 adoption by Ordinance of The 2004 Greater Ellendale Comprehensive Plan:

The Special Study Areaⁱ, or portions of it, may be designated as a potential annexation area by vote of the Ellendale Town Council, upon completion of the following in a manner satisfactory to the Council:

1. Future land use designation for the new area (presumed to be mixed use).
2. Ellendale Sanitary Sewer District expansion proposal to serve the new area, approved by Sussex County.
3. Potential annexation area boundary acceptable to DE State Office of Planning Coordination and DE Department of Agriculture.
4. US 113 and Route 16 access plan for the new area (vehicular, transit, pedestrian and bicycle) acceptable to DE Department of Transportation.
5. Public water service proposal acceptable to the Town and DE Public Service Commission.
6. Planning and Zoning Commission established by the Town.
7. Zoning Ordinance and Subdivision Regulations adopted by the Town.
8. Natural resources protection plan acceptable to DE Department of Natural Resources and Environmental Control and Delaware Department of Agriculture.
9. Progress toward plan for essential municipal services (police, fire, administration, code enforcement).
10. Phasing of potential annexation vis a vis Phase 1 and Phase 2 Potential Annexation Areas.

ⁱ Area west of US Route 113, as shown on the 2004 Greater Ellendale Comprehensive Plan - Future Land Use Plan, Map # 29

THE 2004 GREATER ELLENDALE COMPREHENSIVE PLAN

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- 21. Sussex County Comprehensive Plan Update: Future Land Use Plan for the Ellendale Area**
- 22. Traffic Conditions in the Ellendale Area**
- 23. Potential Town of Ellendale-Railroad Square Historic District**
- 24. Existing Land Use: Greater Ellendale Area**
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- 29. Greater Ellendale Area Future Land Use**
- 30. Town of Ellendale Future Land Use**
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